

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: July 30, 2002, 08:07:01 ; Search time 15.98 Seconds  
(without alignments)  
82.382 Million cell updates/sec

Title: US-10-016-969-3

Perfect score: 180  
Sequence: 1 IKPEAPGDASPEELNRYASLRHLYLVTRQRY 34

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

arched: 105224 segs, 38719550 residues

Total number of hits satisfying chosen parameters: 105224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : SwissProt\_40:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	180	100.0	97 1 PYV_HUMAN	P10082 homo sapien
2	171	95.0	36 1 PYV_PIG	P01305 sus scrofa
3	171	95.0	93 1 PYV_MOUSE	Q96922 mus musculu
4	171	95.0	98 1 PYV_RAT	P10631 rattus norv
5	135	86.1	97 1 PYV_BOVIN	P51694 bos taurus
6	131	83.9	36 1 SPYV_PHTBI	P80955 phyllomedus
7	147	81.7	36 1 PYV_AMICA	P28205 amia calva
8	145	80.6	36 1 PYV_LEPSP	P09473 lepisosteus
9	144	80.0	36 1 PYV_ONCKI	P03474 oncorhynch
10	144	80.0	36 1 PYV_RAJRH	P29206 raja rhina
11	143	79.4	97 1 PYV_BRARE	Q918P2 brachydanio
12	142	78.9	36 1 PYV_RANRI	P29204 rana ridibu
13	140	77.8	36 1 NEUV_DICLA	O918P2 rana ridibu
14	139	77.2	36 1 NEUV_ONCKY	O918P2 oncorhynch
15	138	76.7	36 1 NEUV_GADMO	P28071 oncorhynch
16	136	75.6	37 1 PYV_CHICK	P80167 gadus morhu
17	135	75.0	97 1 NEUV_CHICK	P29203 gallus gall
18	134	74.4	36 1 NEUV_PIG	P28673 gallus gall
19	134	74.4	36 1 NEUV_BRARE	P01304 sus scrofa
20	133	73.9	36 1 PYV_LORENT	O918P3 brachydanio
21	132	73.3	36 1 NEUV_RABIT	P81028 orochromis
22	132	73.3	97 1 NEUV_HUMAN	P09640 crytolagus
23	132	73.3	97 1 NEUV_MOUSE	P01303 homo sapien
24	132	73.3	97 1 NEUV_RAT	P57774 mus musculu
25	131	72.8	36 1 NEUV_SHEEP	P07808 rattus norv
26	129	71.7	36 1 NEUV_XENLA	P14765 ovis aries
27	129	71.7	97 1 PYV_XENLA	P29949 rana ridibu
28	128	71.1	97 1 PYV_LAMFL	P33689 xenopus lae
29	127	70.6	97 1 PYV_DICLA	P48698 lampetra fl
30	127	70.6	96 1 NEUV_CARAU	O96998 dicentrarch
31	126	70.0	104 1 NEUV_LAMFL	P28672 carassius a
32	124	68.9	98 1 NEUV_TORMA	P48097 lampetra fl
33	124	68.9	99 1 PYV_DICLA	P28674 torpedo mar
				O96999 dicentrarch

34	122	67.8	36 1 PYV_MYOSC	P09641 myoxocephal
35	121	67.2	69 1 PYV_LOPAM	P09475 lophius ame
36	118	65.6	36 1 PMY_PETMA	P80024 petromyzon
37	106	58.9	59 1 PAHO_SHEEP	P01301 ovis aries
38	106	58.9	131 1 PAHO_BOVIN	P01302 bos taurus
39	104	57.8	36 1 PAHO_PIG	P01300 sus scrofa
40	104	57.8	93 1 PAHO_CANFA	P01299 canis faml
41	102	56.7	36 1 PAHO_CERSI	P37999 ceratotheri
42	102	56.7	36 1 PAHO_RABIT	P41336 oryctolagus
43	100	55.6	36 1 PAHO_LABAR	P41337 larus argen
44	99	55.0	36 1 PAHO_DIDMA	P18107 didelphis m
45	99	55.0	36 1 PAHO_MACAU	P33684 macaca mula

## ALIGNMENTS

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RESULT 1
ID PYV_HUMAN STANDARD; PRT; 97 AA.
AC P10082:
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Peptide YY precursor (PYV) (peptide tyrosine tyrosine).
GN PYV.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
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RP TISSUE=Colon mucosa;
RC MEDLINE=93305732; PubMed=8318545;
RA Kohli K., Nata K., Yonekura H., Nagai A., Konno K., Okamoto H.;
RT "Cloning and structural determination of human peptide YY cDNA and
RT gene."
RL Biochim. Biophys. Acta 1173:345-349(1993).
RN [2]
RP TISSUE=Lymphocytes;
RC Herzog H.;
RT Submitted (NOV-1993) to the EMBL/GenBank/DBJ databases.
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RC MEDLINE=89076307; PubMed=3202875;
RA Tatemoto K., Nakano I., Maki G., Angwin P., Mann M., Schilling J.,
RA Go V.L.W.;
RT "Isolation and primary structure of human peptide YY."
RL Biochem. Biophys. Res. Commun. 157:713-717(1988).
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RN [46]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [47]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [48]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [49]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [50]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [51]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [52]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [53]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [54]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [55]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [56]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [57]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,
RA Goebel H., Niebel W., Davis M., Lee T.D., Shively J.E.,
RA Reeve J.R., Jr.;
RT "A new molecular form of PYV: structural characterization of human
RT PY(3-36) and PY(1-36)."
RL Peptides 10:797-803(1989).
RN [58]
RP TISSUE=Colon mucosa;
RC MEDLINE=90068171; PubMed=2587421;
RA Ederlein G.A., Eysselein V.E., Schaeffer
```

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CC  
CC  
DR EMBL: D13897; BAA02997.1; -  
DR EMBL: D13897; BAA02998.1; -  
DR EMBL: D13899; BAA03000.1; -  
DR EMBL: D13902; BAA03002.1; -  
DR EMBL: L25648; AAA36433.1; -  
DR PIR: A31358; A31358.  
DR PIR: A60676; A60676.  
DR HSP: P01303; IRON.  
DR MIM: 600781; -  
DR InterPro: IPR001955; Pancreatic\_horm.  
DR Pfam: PF00159; hormone3; 1.  
DR PRINTS: PR00278; PANCHORMONE.  
DR ProDom: PD001267; PANCHORMONE.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
KW Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;  
KW Signal; Alternative splicing.  
FT SIGNAL 1 28  
FT PROPEP 68 97  
FT MOD\_RES 64 64  
FT VASAPLIC 91 97  
FT VARIANT 72 72  
FT T -> R.  
SQ SEQUENCE 97 AA; 11046 MW; DD16B73407F56A4 CRC64;

Query Match 100.0%; Score 180; DB 1; Length 97;  
Best Local Similarity 100.0%; Pred. No. 1.8e-18;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAGEDASPEELNRYASLRHYLNLVTRQRY 34  
D0 31 IKPEAGEDASPEELNRYASLRHYLNLVTRQRY 64

RESULT 2  
ID PYX\_PIG STANDARD; PRT; 36 AA.  
AC P01305;  
DT 21-JUL-1986 (Rel. 01, Created)  
DT 21-JUL-1986 (Rel. 01, Last sequence update)  
DT 16-OCT-2001 (Rel. 40, Last annotation update)  
DE Peptide YY (PY) (Peptide tyrosine tyrosine).  
GN PY.  
OS Sus scrofa (Pig), and  
OS Canis familiaris (Dog).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.  
OX NCBI\_Taxid=9823, 9615;

RP SEQUENCE.  
RC SPECIES-Pig;  
RX MEDLINE=82222168; PubMed=6953409;  
RA Tatamoto K.;  
RT "Isolation and characterization of peptide YY (PY), a candidate gut  
hormone that inhibits pancreatic exocrine secretion.";  
RL proc. Natl. Acad. Sci. U.S.A. 79:2514-2518(1982).  
RN [2]  
RP SEQUENCE.  
RC SPECIES-C. familiaris;  
RX MEDLINE=90259843; PubMed=2342986;  
RA Eysselein V.F., Eberlein G.A., Grandt D., Schaeffer M., Zehres B.,  
RA Behn U., Schefer D., Goebel H., Davis M., Lee T.D., Shively J.E.,  
RA Meyer H.E., Reeve J.R. Jr.;  
RT "Structural characterization of canine PY.";  
RL Peptides 11:111-116(1990).  
CC -1- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,  
CC HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC  
CC MOBILITY.

CC  
CC  
CC -1- SUBCELLULAR LOCATION: Secreted.  
CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYX FAMILY.  
DR PIR: A01574; YYPG.  
DR PIR: A60416; A60416.  
DR HSP: P01303; IRON.  
DR InterPro: IPR001955; Pancreatic\_horm.  
DR Pfam: PF00159; hormone3; 1.  
DR PRINTS: PR00278; PANCHORMONE.  
DR ProDom: PD001267; PANCHORMONE.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
KW Hormone; Amidation.  
FT MOD\_RES 36  
SQ SEQUENCE 36 AA; 4242 MW; 02CD6B8C586DCC8D CRC64;

Query Match 95.0%; Score 171; DB 1; Length 36;  
Best Local Similarity 97.0%; Pred. No. 9.7e-18;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAGEDASPEELNRYASLRHYLNLVTRQRY 34  
D0 4 KPEAGEDASPEELNRYASLRHYLNLVTRQRY 36

RESULT 3  
ID PYX\_MOUSE STANDARD; PRT; 93 AA.  
AC Q9P82;  
DT 16-OCT-2001 (Rel. 40, Created)  
DT 16-OCT-2001 (Rel. 40, Last sequence update)  
DT 01-MAR-2002 (Rel. 41, Last annotation update)  
DE Peptide YY precursor (PY) (Peptide tyrosine tyrosine) (Fragment).  
GN PY.  
OS Mus musculus (Mouse).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
OX NCBI\_Taxid=10090;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN-BALB/c; TISSUE-Liver;  
RA Brown G.J., James R., Radle L.W.;  
RL Submitted (DEC-2000) to the EMBL/GenBank/DBJ databases.  
CC -1- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,  
CC HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC  
CC MOBILITY.  
CC -1- SUBCELLULAR LOCATION: Secreted.  
CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYX FAMILY.  
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CC EMBL: AF325866; AAG42908.1; -  
DR MGD: MGI:99924; Pyx.  
DR InterPro: IPR001955; Pancreatic\_horm.  
DR Pfam: PF00159; hormone3; 1.  
DR PRINTS: PR00278; PANCHORMONE.  
DR ProDom: PD001267; PANCHORMONE.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
KW Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;  
KW Signal.  
FT SIGNAL 1 28  
FT PROPEP 29 64  
FT MOD\_RES 64 64  
SQ SEQUENCE 64 AA; 64  
AMIDATION (G-65 PROVIDE AMIDE GROUP).

FT NON\_TER 93 93  
SQ SEQUENCE 93 AA; 10481 MW; 232090F0592030 CRC64;

Query Match 95.0%; Score 171; DB 1; Length 93;  
Best Local Similarity 97.0%; Pred. No. 3.1e-17;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHLYNLVTRQRY 34  
Db 32 KPEAPGEDASPEELNRYASLRHLYNLVTRQRY 64

RESULT 4  
ID PYT\_RAT STANDARD; PRT; 98 AA.  
PYT\_RAT P10631;

01-JUL-1989 (Rel. 11, Created)  
01-JUL-1989 (Rel. 11, Last sequence update)  
16-OCT-2001 (Rel. 40, Last annotation update)  
Peptide YY precursor (PY) (Peptide tyrosine tyrosine).

OS Rattus norvegicus (Rat).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
NCBI\_TaxId=10116;

[1]  
SEQUENCE FROM N.A.

MEDLINE=88007492; PubMed=3654598;

Leiter A.B., Todter A., Wolfe H.J., Taylor I.L., Cooperman S.,

Mandel G., Goodman R.H.;  
"Peptide YY. Structure of the precursor and expression in exocrine

pancreas.";  
J. Biol. Chem. 262:12984-12988(1987).

RT

SEQUENCE FROM N.A.

MEDLINE=91367188; PubMed=1890992;

Krasinski S.D., Wheeler M.B., Leiter A.B.;

"Isolation, characterization, and developmental expression of the rat

peptide-YY gene.";  
Mol. Endocrinol. 5:433-440(1991).

RL

SEQUENCE OF 29-64.

MEDLINE=88321122; PubMed=3413293;

Corder R., Gaillard R.C., Boehlen P.;

"Isolation and sequence of rat peptide YY and neuropeptide Y.";  
Regul. Pept. 21:253-261(1988).

-1- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,  
HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC

MOBILITY.

-1- SUBCELLULAR LOCATION: Secreted.

-1- SIMILARITY: BELONGS TO THE NPY / PPY / PYV FAMILY.

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CC

DR EMBL; S57220; AAB19752.1; -

DR EMBL; M17523; AAA41222.1; -

DR PIR; A29364; A29364.

DR PIR; A37955; A37955.

DR HSSP; P01303; IRON

InterPro: IP8001955; Pancreatic\_hormn.

DR Pfam; PF00159; hormone3; 1.

PRINTS; PR00278; PANCHEORMONE.

PRODOM; PD001267; Pancreatic\_hormn; 1.

DR SMART; SM00309; PAH; 1.

DR PROSITE; PS00265; PANCHEATIC\_HORMONE\_1; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

KW Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;

KM Signal.

FT SIGNAL.

FT PEPTIDE

FT PROPER

FT MOD\_RES

SQ SEQUENCE

98 AA; 11121 MW; 994C0C3AD68A7DE CRC64;

Query Match 95.0%; Score 171; DB 1; Length 98;  
Best Local Similarity 97.0%; Pred. No. 3.3e-17;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHLYNLVTRQRY 34  
Db 32 KPEAPGEDASPEELNRYASLRHLYNLVTRQRY 64

RESULT 5  
ID PYT\_BOVIN STANDARD; PRT; 97 AA.  
PYT\_BOVIN P51694;

01-OCT-1996 (Rel. 34, Created)

01-OCT-1996 (Rel. 34, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

Peptide YY precursor (PY) (Peptide tyrosine tyrosine).

GN

Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

OC Bovidae; Bovinae; Bos.

NCBI\_TaxId=9913;

[1]

SEQUENCE FROM N.A.

MEDLINE=95132646; PubMed=7831336;

Herzog H., Hort Y., Schneider R., Shine J.;

"Seminal plasma: recent evolution of another member of the

neuropeptide Y gene family";  
Proc. Natl. Acad. Sci. U.S.A. 92:594-598(1995).

RT

-1- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,  
HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC

MOBILITY.

-1- SUBCELLULAR LOCATION: Secreted.

-1- SIMILARITY: BELONGS TO THE NPY / PPY / PYV FAMILY.

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CC

DR EMBL; L37369; AAC37326.1; -

DR HSSP; P01303; IRON.

InterPro: IP8001955; Pancreatic\_hormn.

DR Pfam; PF00159; hormone3; 1.

PRINTS; PR00278; PANCHEORMONE.

PRODOM; PD001267; Pancreatic\_hormn; 1.

DR SMART; SM00309; PAH; 1.

DR PROSITE; PS00265; PANCHEATIC\_HORMONE\_1; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

DR PROSITE; PS50276; PANCHEATIC\_HORMONE\_2; 1.

Matches 28; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
 OY 2 KPEAPGEDASPELNRYYSLSRHYNLVTRORY 34  
 DB 32 KPOABGEHASPELNRYYSLSRHYNLVTRORF 64

RESULT 6  
 SPY\_PHYBI STANDARD; PRT: 36 AA.  
 AC P80952;  
 DT 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 16-OCT-2001 (Rel. 40, Last annotation update)  
 DE Skin peptide tyrosine-tyrosine (SPY).  
 OS Phyllomedusa bicolor (Two-colored leaf frog).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Amphibia; Batrachia; Anura; Neobatrachia; Bufonidae; Hylidae;  
 OC Phyllomedusa  
 NCBI\_TaxID=8393;  
 OX NCBI\_TaxID=8393;  
 RN [1]  
 RP SEQUENCE.  
 RA TISSUE=Skin;  
 RA MEDLINE=95024100; PubMed=7937944;  
 RA Mor A., Chartrel N., Vaudry H., Nicolas P.;  
 RA "Skin peptide tyrosine-tyrosine, a member of the pancreatic  
 RA polypeptide family: Isolation, structure, synthesis, and endocrine  
 RA activity.";  
 RA Proc. Natl. Acad. Sci. U.S.A. 91:10295-10299(1994).  
 RL [2]  
 RN CHARACTERIZATION.  
 RP MEDLINE=96186932; PubMed=8601432;  
 RA Youloukis I., Shai Y., Nicolas P., Mor A.;  
 RA "Broad spectrum antibiotic activity of skin-py.";  
 RA FBS Lett. 380:237-240(1996).  
 RL [3]  
 CC - FUNCTION: SHOWS A BROAD SPECTRUM OF ANTIBACTERIAL ACTIVITY AGAINST  
 CC GRAM-POSITIVE AND GRAM-NEGATIVE BACTERIA, YEAST AND FUNGI.  
 CC - SUBCELLULAR LOCATION: Secreted.  
 CC - TISSUE SPECIFICITY: SKIN.  
 CC - SIMILARITY: BELONGS TO THE NPY / PPY / PYI FAMILY.  
 DR HSP: P01303; IRON.  
 DR InterPro: IPR001955; Pancreatic\_hormn.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCORHOMNE.  
 DR ProDom: PD001267; PANCORHOMNE.  
 DR SMART: SM00309; PAH: 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
 KW Antibiotic; Amphibian skin; Fungicide; Hormone; Amidation.  
 PT MOD\_RES 36  
 PT MOD\_RES 36  
 PT SEQUENCE 36 AA; 4265 MW; 0725D316031827AE CRC64;

Query Match 83.9%; Score 151; DB 1; Length 36;  
 Best Local Similarity 78.8%; Pred. No. 6.2e-15;  
 Matches 26; Conservative 5; Mismatches 2; Indels 0; Gaps 0;  
 OY 2 KPEAPGEDASPELNRYYSLSRHYNLVTRORY 34  
 DB 4 KPEAPGEDASPELNRYYSLSRHYNLVTRORF 36

RESULT 7  
 PYI\_AMICA STANDARD; PRT: 36 AA.  
 AC P29205;  
 DT 01-DEC-1992 (Rel. 24, Created)  
 DT 01-DEC-1992 (Rel. 24, Last sequence update)  
 DT 01-MAR-2002 (Rel. 41, Last annotation update)  
 DE Peptide YY-like (PYI).  
 RN [1]  
 RN Amla calva (Bowfin).  
 RN Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OX Actinopterygii; Neopterygii; Amiiiformes; Amidae; Amla.  
 NCBI\_TaxID=7924;  
 RN [1]  
 RP SEQUENCE.  
 RA TISSUE=Pancreas;  
 RA MEDLINE=91296574; PubMed=2067973;  
 RA Conlon J.M., Bjerning C., Moon T.W., Youson J.H., Thim L.;  
 RA "Neuropeptide Y-related peptides from the pancreas of a teleostean  
 RA (eel), holostean (bowfin) and elasmobranch (skate) fish.";  
 RA Peptides 12:221-228(1991).  
 RL [2]  
 CC - SUBCELLULAR LOCATION: Secreted.  
 CC - SIMILARITY: BELONGS TO THE NPY / PPY / PYI FAMILY.  
 DR HSP: P01303; IRON.  
 DR InterPro: IPR001955; Pancreatic\_hormn.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCORHOMNE.  
 DR ProDom: PD001267; PANCORHOMNE.  
 DR SMART: SM00309; PAH: 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
 KW Hormone; Amidation.  
 PT MOD\_RES 36  
 PT MOD\_RES 36  
 PT SEQUENCE 36 AA; 4333 MW; 56B46F3C08666671 CRC64;

Query Match 81.7%; Score 147; DB 1; Length 36;  
 Best Local Similarity 78.8%; Pred. No. 2.3e-14;  
 Matches 26; Conservative 3; Mismatches 4; Indels 0; Gaps 0;  
 OY 2 KPEAPGEDASPELNRYYSLSRHYNLVTRORY 34  
 DB 4 KPEAPGEDASPELNRYYSLSRHYNLVTRORF 36

RESULT 8  
 PYI\_LEPSP STANDARD; PRT: 36 AA.  
 AC P09473;  
 DT 01-MAR-1989 (Rel. 10, Created)  
 DT 01-MAR-1989 (Rel. 10, Last sequence update)  
 DT 16-OCT-2001 (Rel. 40, Last annotation update)  
 DE Peptide YY-like (PYI) (Neuropeptide Y-related peptide).  
 OS Lepisosteus spatula (Alligator gar) (Attractosteus spatula).  
 OS Scyliorhinus canicula (Spotted dogfish) (Spotted catshark), and  
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Actinopterygii; Neopterygii; Semionotiformes; Lepisosteidae;  
 OC Lepisosteus.  
 NCBI\_TaxID=7917, 7830, 7797;  
 RN [1]  
 RP SEQUENCE.  
 RA SPECIES=L. spatula; TISSUE=Pancreas;  
 RA MEDLINE=88030594; PubMed=3111873;  
 RA Pollock H.G., Kimmel J.R., Hamilton J.W., Rouse J.B., Ebner K.E.,  
 RA Lane V., Rawlith A.B.;  
 RA "Isolation and structures of alligator gar (Lepisosteus spatula)  
 RA insulin and pancreatic polypeptide.";  
 RA Gen. Comp. Endocrinol. 67:375-382(1987).  
 RL [2]  
 CC - SUBCELLULAR LOCATION: Secreted.  
 CC - SIMILARITY: BELONGS TO THE NPY / PPY / PYI FAMILY.  
 DR HSP: P01303; IRON.  
 DR InterPro: IPR001955; Pancreatic\_hormn.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCORHOMNE.  
 DR ProDom: PD001267; PANCORHOMNE.  
 DR SMART: SM00309; PAH: 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
 KW Hormone; Amidation.  
 PT MOD\_RES 36  
 PT MOD\_RES 36  
 PT SEQUENCE 36 AA; 4333 MW; 56B46F3C08666671 CRC64;

of the spiny dogfish, *Squalus acanthias*.  
 Regul. Pept. 35:252-252(1991).  
 -1- FUNCTION: ELICITS AN INCREASE IN ARTERIAL BLOOD PRESSURE.  
 CC -1- SUBCELLULAR LOCATION: Secreted.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR PIR: S07215; PCGXA.  
 DR PIR: A60022; PCDFY.  
 DR PIR: A49743; A49743.  
 DR HSSP: P01303; IRON.  
 DR InterPro: IPR001955; Pancreatic\_hormn.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCHORMONE.  
 DR PRODOM: PD001267; Pancreatic\_hormn; 1.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS0276; PANCREATIC\_HORMONE\_2; 1.  
 DR Hormone: Amidation.  
 KW MOD\_RES 36 AMIDATION.  
 SEQUENCE 36 AA; 4291 MW; 56A6D8CC086660AA CRC64;

Query Match 80.6%; Score 145; DB 1; Length 36;  
 Best Local Similarity 75.8%; Pred. No. 4.3e-14;  
 Matches 25; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYNLVTRQRY 34  
 ||| ||||| ||||| :||:|||||:|||||  
 DB 4 KPEAPGEDAPPEELAKYYSALRHYNLITRQRY 36

## RESULT 9

AC P09474; STANDARD; PRT; 36 AA.  
 ID PYY\_ONCKI  
 DT 01-MAR-1989 (Rel. 10, Created)  
 DT 01-MAR-1989 (Rel. 10, Last sequence update)  
 DT 16-OCT-2001 (Rel. 40, Last annotation update)  
 DE Peptide YY-like (PYY).  
 OS *Oncorhynchus kisutch* (Coho salmon), and  
 OS *Oncorhynchus mykiss* (Rainbow trout) (Salmo gairdneri).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;  
 OC Procatostomopterygii; Salmoniformes; Salmonidae; Oncorhynchus.  
 NCBI\_TaxID=8019, 8022;  
 OX |||  
 RN SEQUENCE.  
 RP SPECIES-O.kisutch; TISSUE-Pancreas;  
 RA MDLINE=87128023; PubMed=3545195;  
 RA Kimmel J.R., Pilsetskaya E.M., Pollock H.G., Hamilton J.W.,  
 RA Rouse J.B., Ebner K.E., Rawitch A.B.;  
 RT "Structure of a peptide from coho salmon endocrine pancreas with  
 RT homology to neuropeptide Y".  
 RL Biochem. Biophys. Res. Commun. 141:1084-1091(1986).  
 RN [2]  
 RP SEQUENCE.  
 RC SPECIES-O.mykiss; TISSUE-Brain, and Stomach;  
 RX MEDLINE=93092973; PubMed=1459125;  
 RA Jensen J., Conlon J.M.;  
 RT "Characterization of peptides related to neuropeptide tyrosine and  
 RT peptide tyrosine-tyrosine from the brain and gastrointestinal tract  
 RT of teleost fish."  
 RL Eur. J. Biochem. 210:405-410(1992).  
 RN [3]  
 RP SEQUENCE.  
 RC SPECIES-O.mykiss; TISSUE-Brain;  
 RX MEDLINE=93157164; PubMed=1494498;  
 RA Barton C.L., Shaw C., Halton D.W., Thim L.;  
 RT "Rainbow trout (*Oncorhynchus mykiss*) neuropeptide Y."  
 RL Peptides 13:1159-1163(1992).  
 CC -1- SUBCELLULAR LOCATION: Secreted.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR PIR: A26377; A26377.  
 DR HSSP: P01303; IRON.

InterPro: IPR001955; Pancreatic\_hormn.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCHORMONE.  
 DR PRODOM: PD001267; Pancreatic\_hormn; 1.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS0276; PANCREATIC\_HORMONE\_2; 1.  
 DR Hormone: Amidation.  
 KW MOD\_RES 36 AMIDATION.  
 SEQUENCE 36 AA; 4305 MW; 56A6D8CC08666671 CRC64;

Query Match 80.0%; Score 144; DB 1; Length 36;  
 Best Local Similarity 75.8%; Pred. No. 5.9e-14;  
 Matches 25; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYNLVTRQRY 34  
 ||| ||||| ||||| :||:|||||:|||||  
 DB 4 KPEAPGEDAPPEELAKYYSALRHYNLITRQRY 36

## RESULT 10

AC P29206; STANDARD; PRT; 36 AA.  
 ID PYY\_RAJRH  
 DT 01-DEC-1992 (Rel. 24, Created)  
 DT 01-DEC-1992 (Rel. 24, Last sequence update)  
 DT 16-OCT-2001 (Rel. 40, Last annotation update)  
 DE Peptide YY-like (PYY).  
 OS *Raja rhina* (Skate).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;  
 OC Elasmobranchii; Squala; Hyposqualae; Pristiorajae; Batoidae;  
 OC Rajiformes; Rajidae; Raja.  
 NCBI\_TaxID=30478;  
 OX |||  
 RN SEQUENCE.  
 RP MEDLINE=91296574; PubMed=2067973;  
 RX Conlon J.M., Bjerning C., Moon T.W., Youson J.H., Thim L.;  
 RA "Neuropeptide Y-related peptides from the pancreas of a teleostean  
 RT (eel), holostean (bowfin) and elasmobranch (skate) fish."  
 RL Peptides 12:221-226(1991).  
 CC -1- SUBCELLULAR LOCATION: Secreted.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR HSSP: P01303; IRON.  
 DR InterPro: IPR001955; Pancreatic\_hormn.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCHORMONE.  
 DR PRODOM: PD001267; Pancreatic\_hormn; 1.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS0276; PANCREATIC\_HORMONE\_2; 1.  
 DR Hormone: Amidation.  
 KW MOD\_RES 36 AMIDATION.  
 SEQUENCE 36 AA; 4251 MW; 07A7D9DC196660B6 CRC64;

Query Match 80.0%; Score 144; DB 1; Length 36;  
 Best Local Similarity 72.7%; Pred. No. 5.9e-14;  
 Matches 24; Conservative 7; Mismatches 2; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYNLVTRQRY 34  
 ||| ||||| ||||| :||:|||||:|||||  
 DB 4 KPEAPGEDAPPEELAKYYSALRHYNLITRQRY 36

## RESULT 11

AC P918P2; STANDARD; PRT; 97 AA.  
 ID PYY\_BRARE  
 DT 01-MAR-2002 (Rel. 41, Created)  
 DT 01-MAR-2002 (Rel. 41, Last sequence update)  
 DT 01-MAR-2002 (Rel. 41, Last annotation update)  
 DE Peptide YY precursor.

Query Match	79.4%:	Score 143;	DB 1;	Length 97;
Best Local Similarity	72.7%:	Pred. No. 2.7e-13;		
Matches	24:	Conservative	6:	Mismatches
			3:	Indels
			0:	Gaps
QY	2	KPEAPGEDASPEELNRYYSALRHYINLVTRYRY	34	
		:     :     :     :		
	32	KPENPGDDAAPPELAKYTTALRHYNILITRORY	64	
RESULT	12			
PYY_RANRI				
ID	PYY_RANRI	STANDARD:	PRT:	36 AA.
AC	P29304:			
DT	01-DEC-1992 (Rel. 24, Created)			
DT	01-DEC-1992 (Rel. 24, Last sequence update)			
DT	16-OCT-2001 (Rel. 40, Last annotation update)			
DE	peptide YY-like (PYY).			
OS	Rana ridibunda (laughing frog) (Marsh frog).			
OS	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OS	Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae; Rana.			
OS	NCBI_Taxid=8406;			
ORF	[1]			
ORF	SEQUENCE.			
ORF	TISSUE=Intestine;			
ORF	MEDLINE=92319697; PubMed=1620652;			
ORF	Conlon J.M., Chartrel N., Vaudry H.;			
ORF	"Primary structure of frog PYY: implications for the molecular			
ORF	evolution of the pancreatic polypeptide family.";			

RESULT	13
NEUY_DICTLA	
ID	NEUY_DICTLA STANDARD; PRT; 99 AA.
AC	G9PFA0; G9PFG7;
DT	16-OCT-2001 (Rel. 40, Created)
DT	16-OCT-2001 (Rel. 40, Last sequence update)
DT	01-MAR-2002 (Rel. 41, Last annotation update)
DE	Neuropeptide Y precursor (NPY).
GN	NPY.
OS	Dicentrarchus labrax (European sea bass).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC	Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC	Acanthomorpha; Acanthopterygii; Percomorphia; Perciformes; Percoidae;
OC	Moronidae; Dicentrarchus.
NB	NBI_TaxID=13489;
[1]	SEQUENCE FROM N.A.
RP	TISSUE=Brain;
RA	Cerda-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.,
RA	Llamiar D.;
RT	"Neuropeptide Y, endocrine gut peptide yy and fish pancreatic peptide
RT	y expression in the brain of a teleost fish (Dicentrarchus labrax):
RT	from cloning to evolutionary considerations.";
RL	Submitted (Apr-1998) to the EMBL/GenBank/DDbj databases.
RN	[2]
RP	SEQUENCE OF 1-62 FROM N.A.
RC	TISSUE=Blood;
RA	Cerda-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.,
RA	Llamiar D.;
RT	"Deduced peptide sequence of neuropeptide y exon 2 from sea bass
RT	(Dicentrarchus labrax).";
RL	Submitted (APR-1998) to the EMBL/Genbank/DDbj databases.
-I-	FUNCTION: NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN
-I-	SERETION OF GONADOTROPHIN-RELEASE HORMONE.
-I-	SUBCELLULAR LOCATION: Secreted.
-I-	SIMILARITY: BELONGS TO THE NPY / PPV / PVY FAMILY.
CC	
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC	or send an email to <a href="mailto:license@isb-sib.ch">license@isb-sib.ch</a> ).
CC	
EMBL:	AJ005378; CAB64932.1; -
DR	EMBL:
DR	AJ005381; CAB64935.1; -
HSSP:	P01303; IRON.

DR InterPro: IPR001955; Pancreatic\_horm.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCHORMONE.  
 DR PRODOM: PD001267; Pancreatic\_horm; 1.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
 DR Neuropeptide: Cleavage on pair of basic residues; Signal; Amidation.  
 FT SIGNAL 1 28  
 FT PEPTIDE 29 64 NEUROPEPTIDE Y.  
 FT PROPE 68 99  
 FT MOD\_RES 64 64  
 SQ SEQUENCE 99 AA; 11260 MW; 4EEFAD164964184 CRC64;

Query Match 77.8%; Score 140; DB 1; Length 99;  
 Best Local Similarity 70.6%; Pred. No. 7, de-13;  
 Matches 24; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

1 IKPEAPGEDASPEELNRYASLRHYNLVTQRQY 34  
 :||| ||||| ||| :|||:|||||:|||||  
 31 VKPENGEDAPAEELAKYYSALRHYNLITQRQY 64

RESULT 14  
 ID NEUY\_ONCMY STANDARD: PRT; 36 AA.  
 AC P29071:  
 DT 01-DEC-1992 (Rel. 24, Created)  
 DT 01-DEC-1992 (Rel. 24, Last sequence update)  
 DT 01-MAR-2002 (Rel. 41, Last annotation update)  
 DE Neuropeptide Y (NPY).  
 GN NPY.  
 OS Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;  
 OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.  
 OX NCBI\_TaxID=8022;  
 RN [1]  
 RC SEQUENCE.  
 RP TISSUE-Brain;  
 RX MEDLINE=93092973; PubMed=1459125;  
 RA Jensen J., Conlon J.M.;  
 RT "Characterization of peptides related to neuropeptide tyrosine and  
 of teleost fish.";  
 Eur. J. Biochem. 210:405-410(1992).  
 CC -1- FUNCTION: NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN  
 SECRETION OF GONADOTROPHIN-RELEASE HORMONE.  
 CC -1- SUBCELLULAR LOCATION: Secreted.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR HSSP: P01303; IROH.  
 DR InterPro: IPR001955; Pancreatic\_horm.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRODOM: PD001267; PANCHORMONE.  
 DR PRINTS: PR00278; PANCHORMONE.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
 DR Neuropeptide: Amidation.  
 FT MOD\_RES 36 36  
 SQ SEQUENCE 36 AA; 4311 MW; E2A32293A866611C CRC64;

Query Match 77.2%; Score 139; DB 1; Length 36;  
 Best Local Similarity 70.6%; Pred. No. 3e-13;  
 Matches 24; Conservative 5; Mismatches 5; Indels 0; Gaps 0;

1 IKPEAPGEDASPEELNRYASLRHYNLVTQRQY 34  
 :||| ||||| ||| :|||:|||||:|||||  
 3 VKPENGEDAPAEELAKYYSALRHYNLITQRQY 36

RESULT 15  
 ID NEUY\_GADMO STANDARD: PRT; 36 AA.  
 AC P80167:  
 DT 01-DEC-1992 (Rel. 24, Created)  
 DT 01-DEC-1992 (Rel. 24, Last sequence update)  
 DT 01-MAR-2002 (Rel. 41, Last annotation update)  
 DE Neuropeptide Y (NPY).  
 GN NPY.  
 OS Gadus morhua (Atlantic cod).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;  
 OC Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae;  
 OC Gadus.  
 OX NCBI\_TaxID=8049;  
 RN [1]  
 RC SEQUENCE.  
 RP TISSUE-Brain;  
 RX MEDLINE=93092973; PubMed=1459125;  
 RA Jensen J., Conlon J.M.;  
 RT "Characterization of peptides related to neuropeptide tyrosine and  
 of teleost fish.";  
 Eur. J. Biochem. 210:405-410(1992).  
 CC -1- FUNCTION: NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN  
 SECRETION OF GONADOTROPHIN-RELEASE HORMONE.  
 CC -1- SUBCELLULAR LOCATION: Secreted.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR PIR: S27054; S27054.  
 DR HSSP: P01303; IROH.  
 DR InterPro: IPR001955; Pancreatic\_horm.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCHORMONE.  
 DR PRODOM: PD001267; PANCHORMONE.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
 DR Neuropeptide: Amidation.  
 FT MOD\_RES 36 36  
 SQ SEQUENCE 36 AA; 4267 MW; 17B09AA83867A7B6 CRC64;

Query Match 76.7%; Score 138; DB 1; Length 36;  
 Best Local Similarity 70.6%; Pred. No. 4.1e-13;  
 Matches 24; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

1 IKPEAPGEDASPEELNRYASLRHYNLVTQRQY 34  
 :||| ||||| ||| :|||:|||||:|||||  
 3 VKPENGEDAPAEELAKYYSALRHYNLITQRQY 36

Search completed: July 30, 2002, 08:07:01  
 Job time: 354 sec

Tue Jul 30 10:09:20 2002

us-10-016-969-3.rsp

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GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: July 30, 2002, 08:06:41 ; Search time 44.26 Seconds  
(without alignments)  
132.893 Million cell updates/sec

Title: US-10-016-969-3

Perfect score: 180  
Sequence: 1 KPEAPGEDASPEELNRYVASLRHYLNLVTRQRY 34

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

arched: 562222 seqs, 172994929 residues

Total number of hits satisfying chosen parameters: 562222

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL.19:\*  
1: sp-archaea:\*  
2: sp-bacteria:\*  
3: sp-fungi:\*  
4: sp-human:\*  
5: sp-invertebrate:\*  
6: sp-mammal:\*  
7: sp-mhc:\*  
8: sp-organelle:\*  
9: sp-phage:\*  
10: sp-plant:\*  
11: sp-rodent:\*  
12: sp-virus:\*  
13: sp-vertebrate:\*  
14: sp-unclassified:\*  
15: sp-rvius:\*  
16: sp-bacteriap:\*  
17: sp-archaeap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	176	97.8	34	6	09TR92
2	176	97.8	36	6	09TR93
3	171	95.0	98	11	09IXD0
4	143	79.4	97	13	0918P2
5	137	76.1	99	13	090WF4
6	136	75.6	95	13	0919D3
7	134	74.4	76	6	09NOM5
8	134	74.4	96	13	09DCK7
9	134	74.4	96	13	0918P3
10	132	73.3	97	6	09XSW6
11	131	72.8	89	11	0925V2
12	131	72.8	90	6	09TS16
13	129	71.7	97	13	09PM68
14	127	70.6	99	13	090WF3
15	124	68.9	36	13	09BS46
16	121	67.2	97	13	090WF2

17	98	54.4	59	6	09GK10	09gk10 sus scrofa
18	63	35.0	89	5	09U0S9	09u0s9 lymnaea sta
19	62	34.4	91	13	09PSS1	09pss1 lampetra fl
20	59	32.8	92	5	027441	027441 apysia cal
21	58	32.2	77	16	097Q92	097q92 streptococ
22	58	32.2	621	12	038017	038017 salmonid he
23	56.5	31.4	504	8	09TM13	09tm13 cyanidium c
24	56.5	31.4	6420	2	P95814	P95814 streptomyc
25	54.5	30.3	356	2	09L218	09l218 streptomyc
26	54.5	30.3	359	3	09C439	09c439 pneumocysti
27	54	30.0	501	4	0960U6	096u6 homo sapien
28	54	30.0	501	4	0961X5	096x5 homo sapien
29	53.5	29.7	377	3	096W44	096w44 pneumocysti
30	53	29.4	33	4	09NR16	09nr16 homo sapien
31	53	29.4	321	17	09YD78	09yd78 aeryrium p
32	53	29.4	530	5	016850	016850 caenorhabdi
33	53	29.4	1145	11	09DBV3	09dbv3 mus musculu
34	52.5	29.2	114	10	09XH20	09xh20 arabidopsis
35	52	28.9	135	17	09V091	09v091 pyrococcus
36	52	28.9	342	16	09PB65	09pb65 xylella fas
37	52	28.9	1333	5	09V1N0	09v1n0 drosophila
38	51.5	28.6	112	2	091739	091739 bartonella
39	51.5	28.6	684	10	09C6C8	09c6c8 arabidopsis
40	51	28.3	47	16	097079	097g79 streptococ
41	51	28.3	192	5	096280	096280 plasmodium
42	51	28.3	246	2	092H78	092h78 pasteurella
43	51	28.3	260	5	076669	076669 caenorhabdi
44	51	28.3	267	5	095283	095283 leishmania
45	50.5	28.1	224	4	09BS49	09bs49 homo sapien

## ALIGNMENTS

RESULT	1	PRELIMINARY:	PRT:	34 AA.
Q9TR92	Q9TR92			
AC	Q9TR92:			
DT	01-MAY-2000 (TREMBLrel. 13, Created)			
DT	01-MAY-2000 (TREMBLrel. 13, Last sequence update)			
DT	01-OCT-2001 (TREMBLrel. 16, Last annotation update)			
DE	PEPTIDE YY, PYY(3-36).			
OS	Oryctolagus cuniculus (Rabbit).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.			
OX	NCBI_TaxID=9986;			
RN	[1]			
RP	SEQUENCE.			
RX	MEDLINE=95075735; PubMed=7984499;			
RA	Grandt D., Schlimczek M., Struk K., Shively J., Byssselein V.E.,			
RA	Goebel H., Reeve J.R., Jr.,			
RT	"Characterization of two forms of peptide YY, PYY(1-36) and PYY(3-36),			
RT	in the rabbit."			
RL	Peptides 15:815-820(1994).			
CC	-1. SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.			
DR	HSP: P01303; IRON.			
DR	InterPro: IPR001955; Pancreatic_horm.			
DR	Pfam: PF00159; hormone3; 1.			
DR	ProDom: PD001267; Pancreatic_horm; 1.			
DR	SMART: SM00309; PAH; 1.			
DR	PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.			
DR	PROSITE: PS0276; PANCREATIC_HORMONE_2; 1.			
KW	Amidation.			
SQ	SEQUENCE 34 AA: 4024 MW: 02DAEGC38BA5FC8D CRC64;			

Query Match 97.8% Score 176; DB 6; Length 34;  
Best Local Similarity 100.0%; Pred. No. 5.8e-17;  
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYVASLRHYLNLVTRQRY 34  
DB 2 KPEAPGEDASPEELNRYVASLRHYLNLVTRQRY 34

```

RESULT 2
09TR93 PRELIMINARY; PRT; 36 AA.
AC 09TR93;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-OCT-2001 (TREMBLrel. 18, Last annotation update)
DE PEPTIDE YY, PYY(1-36)
OS Oryctolagus cuniculus (Rabbit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
OX NCB1_TaxID=9986;
RN [1]
RP SEQUENCE.
RX MEDLINE=95075735; PubMed=7984499;
RA Grand D., Schinzel M., Struck K., Shively J., Eysselein V.E.,
RA Goebell H., Reeve J.R.Jr.;
RT "Characterization of two forms of peptide YY, PYY(1-36) and PYY(3-36),
RT in the rabbit."
RL Peptides 15:815-820(1994).
-i SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.
HSSP: P01303; IRON.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormones; 1.
DR PRINTS: PR00278; Pancreatic_hormn.
DR PRODOM: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE: PS50276; PANCREATIC_HORMONE_2; 1.
KW Amidation.
SQ SEQUENCE 36 AA: 4285 MW; 02D499C8086DCC8D CRC64;

Query Match
Best Local Similarity 97.8%; Score 176; DB 6; Length 36;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34
DB 4 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 36
|||||
RESULT 3
091XD0 PRELIMINARY; PRT; 98 AA.
AC 091XD0;
DT 01-DEC-2001 (TREMBLrel. 19, Created)
DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
OS UNKNOWN (PROTEIN FOR MGC:119143).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.
OX NCB1_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=COLON;
RA Strausberg R.;
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: BC010821; AAH10821.1; -.
SQ SEQUENCE 98 AA: 11064 MW; 7AF165A1052C3249 CRC64;

Query Match
Best Local Similarity 95.0%; Score 171; DB 11; Length 98;
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34
DB 32 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 64
|||||

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```

RESULT 4
091BP2 PRELIMINARY; PRT; 97 AA.
AC 091BP2;
DT 01-OCT-2000 (TREMBLrel. 15, Created)
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE PEPTIDE YY PRECURSOR.
GN PYY.
OS Brachydanio rerio (Zebrafish) (Zebra danio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Ostariophysi;
OC Cypriniformes; Cyprinidae; Danio.
OX NCB1_TaxID=7955;
RN [1]
RP SEQUENCE FROM N.A.
RA Soderberg C., Wright A., Ringvall M., Yan Y., Postlethwait J.H.,
RA Brodin L., Larhammar D.;
RT "Zebrafish genes for neuropeptide Y and peptide YY reveal origin by
RT chromosome duplication from an ancestral gene linked to the homeobox
RT cluster."
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.
-i SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.
HSSP: P01303; IRON.
DR ZFIN: ZDB-GENE-960526-71; pyy.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormones; 1.
DR PRINTS: PR00278; Pancreatic_hormn.
DR PRODOM: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE: PS50276; PANCREATIC_HORMONE_2; 1.
KW Amidation; Signal.
FT SIGNAL 1 28 POTENTIAL.
FT CHAIN 29 64 PEPTIDE YY.
SQ SEQUENCE 97 AA: 11175 MW; 96FA07EF091AC2D CRC64;

Query Match
Best Local Similarity 79.4%; Score 143; DB 13; Length 97;
Matches 24; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34
DB 32 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 64
|||||
RESULT 5
090WF4 PRELIMINARY; PRT; 99 AA.
AC 090WF4;
DT 01-DEC-2001 (TREMBLrel. 19, Created)
DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE NEUROPEPTIDE Y.
GN NPY.
OS Paralichthys olivaceus (Flounder).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthopterygii; Acanthopterygii; Percomorpha; Pleuronectiformes;
OC Pleuronectoidae; Paralichthyidae; Paralichthys.
OX NCB1_TaxID=8255;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=BRAIN;
RA Kurokawa T., Suzuki T.;
RT "Development of neuropeptide Y related peptides in the digestive
RT organs during the larval stage of Japanese flounder, Paralichthys
RT olivaceus."
RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: AB055211; BAB62409.1; -.

```



DT 01-OCT-2000 (TREMBlrel. 15, last sequence update)  
 DT 01-DEC-2001 (TREMBlrel. 19, last annotation update)  
 DE NEUROPEPTIDE Y PRECURSOR.  
 GN NPY.  
 OS Brachydanio rerio (Zebrafish) (Zebra danio).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Ostariophysi;  
 OC Cypriniformes; Cyprinidae; Danio.  
 OX NCBI\_TaxId=7955;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Soderberg C., Waith A., Ringvall M., Yan Y., Postlethwait J.H.,  
 RA Brodin L., Lammam D.;  
 RT "Zebrafish genes for neuropeptide Y and peptide YY reveal origin by  
 RT chromosome duplication from an ancestral gene linked to the homeobox  
 RT cluster."  
 RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR EMBL: AF233874; AAF7941.1; -.  
 DR HSSP: P01303; IRON.  
 DR ZFIN: ZDB-GENE-980526-438; npy.  
 DR InterPro: IPR001955; Pancreatc\_horm.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCORHOMNE.  
 DR ProDom: PD001267; Pancreatc\_horm; 1.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
 KW Amidation; signal.  
 FT SIGNAL  
 FT CHAIN  
 FT SEQUENCE 1 28 POTENTIAL.  
 FT 29 64 NEUROPEPTIDE Y.  
 SO SEQUENCE 96 AA; 11031 MW; 4D82A025C8151E33 CRC64;

Query Match 74.4%; Score 134; DB 13; Length 96;  
 Best Local Similarity 69.7%; Pred. No. 9.3e-11;  
 Matches 23; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYNLVTRORY 34  
 DB 32 KPDNGEDAPAEELAKYSAIRHYNLITRORY 64

RESULT 10  
 O9XSM6 PRELIMINARY; PRT; 97 AA.  
 AC O9XSM6;  
 DT 01-NOV-1999 (TREMBlrel. 12, Created)  
 DT 01-NOV-1999 (TREMBlrel. 12, last sequence update)  
 DT 01-DEC-2001 (TREMBlrel. 19, last annotation update)  
 DE NEUROPEPTIDE Y.  
 GN NPY.  
 OS Macaca mulatta (Rhesus macaque).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecoidea; Macaca.  
 OX NCBI\_TaxId=9544;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Abler L.A., Golos T.G., Terasawa E.;  
 RA "Developmental changes in NPY mRNA expression in female rhesus  
 RA monkeys."  
 RT Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR EMBL: AF162280; AADA3583.1; -.  
 DR HSSP: P01303; IRON.  
 DR InterPro: IPR001955; Pancreatc\_horm.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCORHOMNE.  
 DR ProDom: PD001267; Pancreatc\_horm; 1.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
 DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.

KW Amidation.  
 SQ SEQUENCE 97 AA; 10840 MW; 2D209BAC20BD5FE CRC64;

Query Match 73.3%; Score 132; DB 6; Length 97;  
 Best Local Similarity 66.7%; Pred. No. 1.8e-10;  
 Matches 22; Conservative 7; Mismatches 4; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYNLVTRORY 34  
 DB 32 KPDNGEDAPAEELAKYSAIRHYNLITRORY 64

Query Match 72.8%; Score 131; DB 11; Length 89;  
 Best Local Similarity 66.7%; Pred. No. 2.2e-10;  
 Matches 22; Conservative 7; Mismatches 4; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYNLVTRORY 34  
 DB 32 KPDNGEDAPAEELAKYSAIRHYNLITRORY 64

RESULT 12  
 O9TS16 PRELIMINARY; PRT; 90 AA.  
 AC O9TS16;  
 DT 01-MAY-2000 (TREMBlrel. 13, Created)  
 DT 01-MAY-2000 (TREMBlrel. 13, last sequence update)  
 DT 01-DEC-2001 (TREMBlrel. 19, last annotation update)  
 DE NEUROPEPTIDE Y (FRAGMENT).  
 OS Ovis aries (Sheep).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Caprinae; Ovis.  
 OX NCBI\_TaxId=9940;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA Simmons J.M., Daniel J.A., Matteri R.L., Keisler D.H.;  
 RA Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.  
 CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
 DR EMBL: AF095782; AAC6986.1; -.  
 DR HSSP: P01303; IRON.  
 DR InterPro: IPR001955; Pancreatc\_horm.  
 DR Pfam: PF00159; hormone3; 1.  
 DR PRINTS: PR00278; PANCORHOMNE.  
 DR ProDom: PD001267; Pancreatc\_horm; 1.  
 DR SMART: SM00309; PAH; 1.  
 DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.





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OW protein - protein search, using sw model

Run on: July 30, 2002, 08:01:04 ; Search time 25.26 Seconds  
(without alignments)  
129.336 Million cell updates/sec

Title: US-10-016-969-3

Perfect score: 180  
Sequence: 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 34

Scoring table: BLOSUM62  
Gapop 10.0, Gapext 0.5

Archived: 283138 seqs, 96089334 residues

Total number of hits satisfying chosen parameters: 283138

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : PIR.71.\*

1: pir1.\*  
2: pir2.\*  
3: pir3.\*  
4: pir4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	180	100.0	36	2	A31358 peptide YY - human
2	180	100.0	90	2	S34569 peptide YY precursor
3	180	100.0	90	2	S34568 peptide YY precursor
4	180	100.0	97	2	S33795 peptide YY (clone
5	171	95.0	36	1	YYPG peptide YY - pig
6	171	95.0	36	2	A60416 peptide YY - dog
7	171	95.0	98	2	A29364 peptide YY precursor
8	155	86.1	97	2	A55914 pancreatic peptide
9	145	80.6	36	1	PCGXA pancreatic peptide
10	145	80.6	36	1	PCDFY pancreatic peptide
11	145	80.6	36	2	A49743 pancreatic peptide
12	144	80.0	36	2	A26377 pancreatic peptide
13	138	76.7	36	2	S27054 neuropeptide Y - A
14	136	75.6	37	2	S26954 peptide YY-related
15	135	75.0	97	2	A41979 neuropeptide Y pre
16	134	74.4	36	2	NYPGY neuropeptide Y - p
17	132	73.3	36	2	A30485 neuropeptide Y - r
18	132	73.3	36	2	B30485 neuropeptide Y - g
19	132	73.3	97	1	NRHUY neuropeptide Y pre
20	132	73.3	98	2	A25916 neuropeptide Y pre
21	131	72.8	36	2	S07052 neuropeptide Y - s
22	129	71.7	36	2	A48540 neuropeptide Y - c
23	129	71.7	36	2	A39393 neuropeptide Y - i
24	129	71.7	97	2	J01460 neuropeptide Y pre
25	128	71.1	93	2	I50809 peptide YY - river
26	127	70.6	96	2	B41979 neuropeptide Y pre
27	126	70.0	104	2	I50808 neuropeptide Y pre
28	124	68.9	98	2	C41979 peptide YY - short
29	122	67.8	36	1	YRFS

30	121	67.2	37	2	A26781
31	118	65.6	36	2	S16943
32	106	58.9	36	1	PCBO
33	106	58.9	59	1	PCSH
34	104	57.8	36	1	PCPG
35	104	57.8	93	1	PCDG
36	99	55.0	36	1	C61132
37	99	55.0	36	2	J00365
38	99	55.0	36	2	C60071
39	99	55.0	66	1	PCCP
40	99	55.0	95	1	PCBU
41	99	55.0	126	2	A28256
42	98	54.4	36	1	A61132
43	98	54.4	36	1	D61132
44	98	54.4	36	2	A28578
45	97	53.9	36	2	B60413

## ALIGNMENTS

peptide YG - Ameri  
neuropeptide Y - s  
pancreatic hormone  
pancreatic hormone  
pancreatic hormone  
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pancreatic hormone

RESULT 1  
A31358  
peptide YY - human  
C:Species: Homo sapiens (man)  
C:Date: 31-Mar-1990 #sequence\_revision 31-Dec-1991 #text\_change 17-Mar-1999  
C:Accession: A31358; A60676  
R:Takemoto, K.; Nakano, I.; Maki, G.; Angwin, P.; Mann, M.; Schilling, J.; Go, V.L.W.  
Biochem. Biophys. Res. Commun. 157, 713-717, 1988  
A:Title: Isolation and primary structure of human peptide YY.  
A:Reference number: A31358; MUID:89076307  
A:Accession: A31358  
A:Molecule type: protein  
A:Residues: 1-36 <TAT>  
A:Experimental source: colon  
R:Delellin, G.A.; Eysselein, V.E.; Schaeffer, M.; Layer, P.; Grandt, D.; Goebel, H.;  
Peptides 10, 797-803, 1989  
A:Title: A new molecular form of PYY: structural characterization of human PYY(3-36)  
A:Reference number: A60676; MUID:90068171  
A:Accession: A60676  
A:Molecule type: protein  
A:Residues: 1-36 <EBE>  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; intestine; neuropeptide  
F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 100.0%; Score 180; DB 2; Length 36;  
Best Local Similarity 100.0%; Pred. No. 9.8e-18;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 34  
|||||  
Db 3 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36  
|||||

RESULT 2  
S34569  
peptide YY precursor (clone L2) - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 02-Dec-1993 #sequence\_revision 13-Mar-1997 #text\_change 09-May-1997  
C:Accession: S34569  
R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.  
Biochim. Biophys. Acta 1173, 345-349, 1993  
A:Title: Cloning and structural determination of human peptide YY cDNA and gene.  
A:Reference number: S33795; MUID:93305732  
A:Accession: S34569  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-90 <KOH>  
C:Superfamily: pancreatic hormone

Query Match 100.0%; Score 180; DB 2; Length 90;  
Best Local Similarity 100.0%; Pred. No. 2.8e-17;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 34  
|||||  
Db 31 IKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 64

## RESULT 3

peptide YY precursor (clone L1) - human (fragment)

C:Species: Homo sapiens (man)

C:Date: 02-Dec-1993 #sequence\_revision 13-Mar-1997 #text\_change 09-May-1997

C:Accession: S34568

R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.

Biochim. Biophys. Acta 1173, 345-349, 1993

A:Title: Cloning and structural determination of human peptide YY cDNA and gene.

A:Reference number: S33795; MUID:93305732

A:Accession: S34568

A:Status: preliminary

A:Molecule type: mRNA

Residues: 1-90 <KOH>

Superfamily: pancreatic hormone

Query Match 100.0%; Score 180; DB 2; Length 90;  
Best Local Similarity 100.0%; Pred. No. 2.8e-17;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 34  
|||||  
Db 31 IKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 64

## RESULT 4

peptide YY (clone S) - human

C:Species: Homo sapiens (man)

C:Date: 19-Mar-1997 #sequence\_revision 19-Mar-1997 #text\_change 20-Jun-2000

C:Accession: S33795

R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.

Biochim. Biophys. Acta 1173, 345-349, 1993

A:Title: Cloning and structural determination of human peptide YY cDNA and gene.

A:Reference number: S33795; MUID:93305732

A:Accession: S33795

A:Status: preliminary

A:Molecule type: mRNA

Residues: 1-97 <KOH>

A:Cross-references: GB:D13897; NID:g931723; PIDN:BAA02997.1; PID:g9391724

Superfamily: pancreatic hormone

Query Match 100.0%; Score 180; DB 2; Length 97;  
Best Local Similarity 100.0%; Pred. No. 3e-17;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 34  
|||||  
Db 31 IKPEAPGEDASPEELNRYASLRHYLNLVTQRQY 64

## RESULT 5

peptide YY - pig

C:Species: Sus scrofa domestica (domestic pig)

C:Date: 30-Apr-1982 #sequence\_revision 30-Apr-1982 #text\_change 23-Aug-1996

C:Accession: A01574

R:Tatemoto, K.

Proc. Natl. Acad. Sci. U.S.A. 79, 2514-2518, 1982

A:Title: Isolation and characterization of peptide YY (PYY), a candidate gut hormone the

A:Reference number: A01574; MUID:82222168

A:Accession: A01574

A:Molecule type: protein  
A:Residues: 1-36 <TAN>  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; hormone  
F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 95.0%; Score 171; DB 1; Length 36;  
Best Local Similarity 97.0%; Pred. No. 1.6e-16;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTQRQY 34  
|||||  
Db 4 KPEAPGEDASPEELNRYASLRHYLNLVTQRQY 36

## RESULT 6

peptide YY - dog

C:Species: Canis lupus familiaris (dog)

C:Date: 11-Feb-1993 #sequence\_revision 11-Feb-1993 #text\_change 17-Mar-1999

C:Accession: A60416

R:Eysselein, V.E.; Eberlein, G.A.; Grandt, D.; Schaeffer, M.; Zehres, B.; Behn, U.; S

Peptides 11, 111-116, 1990

A:Title: Structural characterization of canine PYY.

A:Reference number: A60416; MUID:90259843

A:Accession: A60416

A:Molecule type: protein

A:Residues: 1-36 <EYS>

C:Superfamily: pancreatic hormone

C:Keywords: amidated carboxyl end; hormone; intestine

F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 95.0%; Score 171; DB 2; Length 36;  
Best Local Similarity 97.0%; Pred. No. 1.6e-16;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTQRQY 34  
|||||  
Db 4 KPEAPGEDASPEELNRYASLRHYLNLVTQRQY 36

## RESULT 7

peptide YY precursor - rat

C:Species: Rattus norvegicus (Norway rat)

C:Date: 31-Dec-1988 #sequence\_revision 31-Dec-1988 #text\_change 16-Jul-1999

C:Accession: A37955; A29364; J00416

R:Krasinski, S.D.; Wheeler, M.B.; Leiter, A.B.

Mol. Endocrinol. 5, 433-440, 1991

A:Title: Isolation, characterization, and developmental expression of the rat peptide

A:Reference number: A37955; MUID:91367188

A:Accession: A37955

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-98 <KRA>

A:Cross-references: GB:S57220; NID:g235283; PIDN:AAB19752.1; PID:g235284

R:Leiter, A.B.; Todter, A.; Wolfe, H.J.; Taylor, I.L.; Cooperman, S.; Mandel, G.; Good

J. Biol. Chem. 262, 12984-12988, 1987

A:Title: Peptide YY. Structure of the precursor and expression in exocrine pancreas.

A:Reference number: A29364; MUID:88007492

A:Accession: A29364

A:Molecule type: mRNA

A:Residues: 1-98 <LEI>

A:Cross-references: GB:M17523; NID:g204316; PIDN:AAA41222.1; PID:g204317

R:Corder, R.; Galliard, R.C.; Boehlen, P.

Regul. Pept. 21, 253-261, 1988

A:Title: Isolation and sequence of rat peptide YY and neuropeptide Y.

A:Reference number: J00416; MUID:88321122

A:Accession: J00416

A:Molecule type: protein

A:Residues: 29-64 <COR>

A: Experimental source: colon  
C: Superfamily: pancreatic hormone

Query Match 95.0%; Score 171; DB 2; Length 98;  
Best Local Similarity 97.0%; Pred. No. 5.1e-16;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 32 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 64

RESULT 8  
A: Species: Bos primigenius taurus (cattle)  
C: Species: Bos primigenius taurus (cattle)  
Date: 23-Mar-1995 #sequence\_revision 05-Apr-1995 #text\_change 16-Jul-1999  
Accession: A55914  
R: Herzog, H.; Hort, Y.; Schneider, R.; Shline, J.  
Proc. Natl. Acad. Sci. U.S.A. 92, 594-598, 1995  
A: Title: Seminal plasma: recent evolution of another member of the neuropeptide Y gene  
A: Reference number: A55914; MUID: 95132646  
A: Accession: A55914  
A: Status: preliminary  
A: Molecule type: DNA  
A: Residues: 1-97 <HER>  
A: Cross-references: GB: I37369; NID: g565219; PIDN: AAC37326.1; PID: g567100  
C: Genetics:  
A: Introns: 63/2; 90/2  
C: Superfamily: pancreatic hormone  
C: Keywords: neuropeptide

Query Match 86.1%; Score 155; DB 2; Length 97;  
Best Local Similarity 84.8%; Pred. No. 7.4e-14;  
Matches 28; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 32 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 64

RESULT 9  
A: Species: Lepisosteus spatula (alligator gar)  
C: Species: Lepisosteus spatula (alligator gar)  
Date: 30-Jun-1991 #sequence\_revision 30-Jun-1991 #text\_change 06-Dec-1996  
Accession: S07215  
R: Pollock, H.G.; Kimmel, J.R.; Hamilton, J.W.; Rouse, J.B.; Ebner, K.E.; Lance, V.; Rawl  
Gen. Comp. Endocrinol. 67, 375-382, 1987  
A: Title: Isolation and structures of alligator gar (Lepisosteus spatula) insulin and pan  
A: Reference number: S07215; MUID: 88030594  
A: Accession: S07215  
A: Molecule type: protein  
A: Residues: 1-36 <POL>  
C: Superfamily: pancreatic hormone  
C: Keywords: amidated carboxyl end; hormone; pancreas  
F: 1-36/Product: pancreatic peptide Y #status experimental <PCH>  
F: 36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 80.6%; Score 145; DB 1; Length 36;  
Best Local Similarity 75.8%; Pred. No. 5.4e-13;  
Matches 25; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 4 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

RESULT 10

PCDFY

pancreatic peptide Y - spiny dogfish  
N: Alternate names: pancreatic hormone Y  
C: Species: Squalus acanthias (spiny dogfish)  
Date: 31-Mar-1993 #sequence\_revision 31-Mar-1993 #text\_change 16-Jun-2000  
Accession: A60022; A56893  
R: Pan, J.Z.; Shaw, C.; Halton, D.W.; Thim, L.; Johnston, C.F.; Fairweather, I.; Bucha  
Regul. Pept. 35, 257, 1991  
A: Title: Isolation and primary structure of peptide Y from the pancreas of the spiny  
A: Reference number: A60022  
A: Accession: A60022  
A: Molecule type: protein  
A: Residues: 1-36 <PAN1>  
A: Note: this reference is an abstract  
R: Pan, J.Z.; Shaw, C.; Halton, D.W.; Thim, L.; Johnston, C.F.; Buchanan, K.D.  
Comp. Biochem. Physiol. B 102, 1-5, 1992  
A: Title: The primary structure of peptide Y (PY) of the spiny dogfish, Squalus acanth  
A: Reference number: A56893; MUID: 92405520  
A: Accession: A56893  
A: Molecule type: protein  
A: Residues: 1-36 <PAN2>  
A: Experimental source: pancreas  
A: Note: sequence extracted from NCBI backbone (NCBIP:114876)  
C: Superfamily: pancreatic hormone  
C: Keywords: amidated carboxyl end; hormone; pancreas  
F: 1-36/Product: pancreatic peptide Y #status experimental <MAT>  
F: 36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 80.6%; Score 145; DB 1; Length 36;  
Best Local Similarity 75.8%; Pred. No. 5.4e-13;  
Matches 25; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 4 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

RESULT 11  
A: Species: Scyliorhinus canicula (smaller spotted catshark)  
N: Alternate names: neuropeptide Y-related peptide  
C: Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted dogfish)  
Date: 07-Apr-1994 #sequence\_revision 07-Apr-1994 #text\_change 07-May-1999  
Accession: A49743  
R: Conlon, J.M.; Balasubramaniam, A.; Hazon, N.  
Endocrinology 128, 2273-2279, 1991  
A: Title: Structural characterization and biological activity of a neuropeptide Y-rela  
A: Reference number: A49743; MUID: 91209266  
A: Accession: A49743  
A: Status: preliminary  
A: Molecule type: protein  
A: Residues: 1-36 <CON>  
C: Superfamily: pancreatic hormone  
C: Keywords: amidated carboxyl end; hormone  
F: 1-36/Product: pancreatic peptide Y #status experimental <MAT>  
F: 36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 80.6%; Score 145; DB 2; Length 36;  
Best Local Similarity 75.8%; Pred. No. 5.4e-13;  
Matches 25; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 4 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

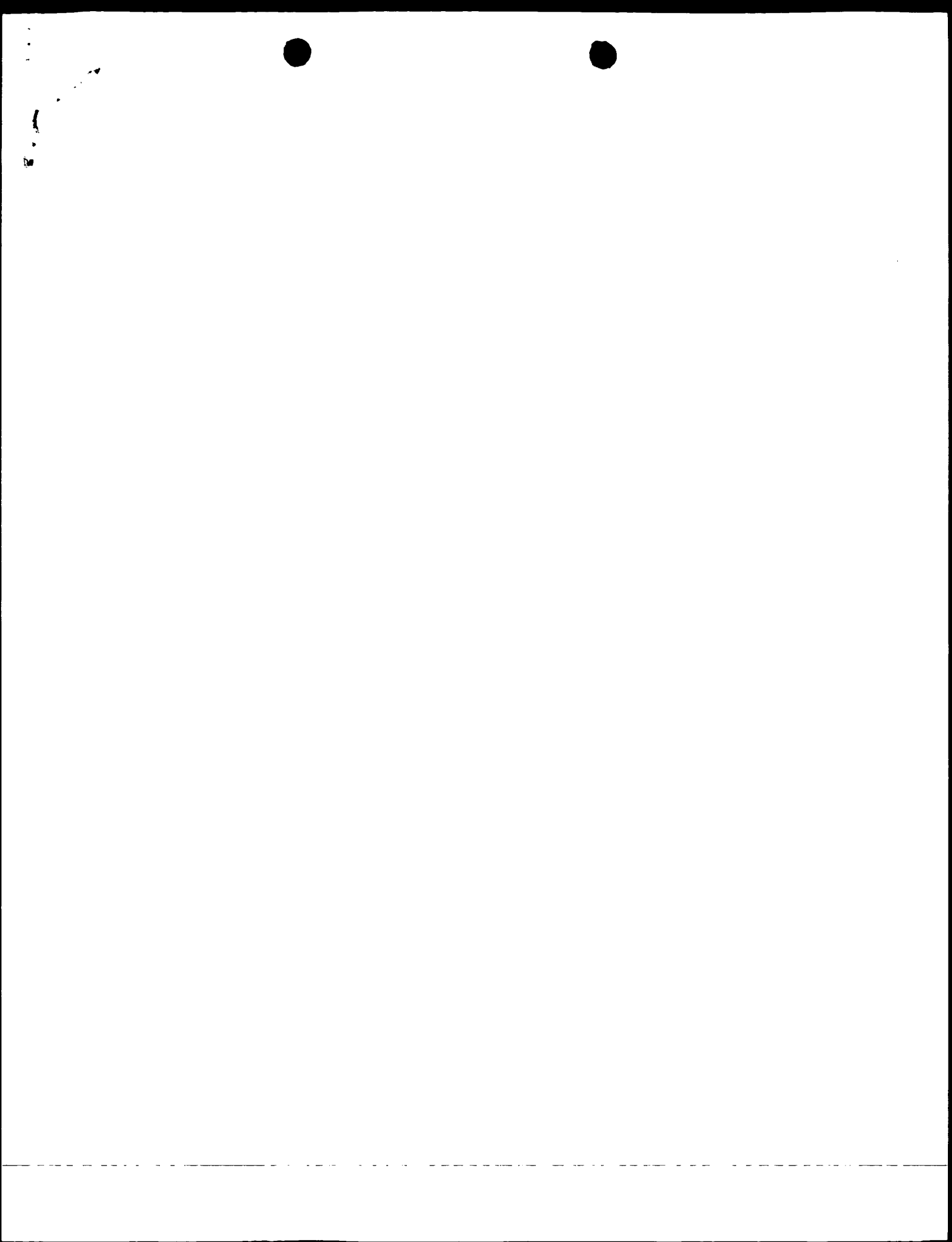
RESULT 12  
A: Species: Oncorhynchus kisutch (coho salmon)  
C: Species: Oncorhynchus kisutch (coho salmon)  
Date: 31-Mar-1988 #sequence\_revision 31-Mar-1988 #text\_change 06-Dec-1996



Tue Jul 30 10:09:20 2002

us-10-016-969-3.rpt

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GenCore version 4.5  
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## OM protein - protein search, using sw model

Run on: July 30, 2002, 07:59:32 ; Search time 25.26 seconds  
(without alignments)  
136.944 Million cell updates/sec

Title: US-10-016-969-2  
Perfect score: 194  
Sequence: 1 YPIKPEAPGEDASPELNRYASLRHYLNTVTORRY 36

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Database: 283138 seqs, 96089334 residues  
Total number of hits satisfying chosen parameters: 283138

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	194	100.0	36	2 A31358	peptide YY - human
2	194	100.0	90	2 S34569	peptide YY precurs
3	194	100.0	90	2 S34568	peptide YY precurs
4	194	100.0	97	2 S33795	peptide YY (clone
5	184	94.8	36	1 YYPG	peptide YY - pig
6	184	94.8	36	2 A60416	peptide YY - dog
7	184	94.8	98	2 A29364	peptide YY precurs
8	168	86.6	97	2 A55914	pancreatic peptide
9	156	80.4	36	1 PCGXA	pancreatic peptide
10	156	80.4	36	1 PCDFY	pancreatic peptide
11	156	80.4	36	2 A49743	pancreatic peptide
12	155	79.9	36	2 A26377	pancreatic peptide
13	152	78.4	36	2 S27054	neuropeptide Y - A
14	147	75.8	37	2 S26954	peptide YY-related
15	147	75.8	97	2 A41979	neuropeptide Y pre
16	146	75.3	36	1 NYPGY	neuropeptide Y - p
17	144	74.2	36	2 A30485	neuropeptide Y - r
18	144	74.2	36	2 B30485	neuropeptide Y - g
19	144	74.2	97	1 NYHUY	neuropeptide Y pre
20	144	74.2	98	2 A25916	neuropeptide Y pre
21	143	73.7	36	2 S07052	neuropeptide Y - s
22	141	72.7	36	2 A48540	neuropeptide Y - c
23	141	72.7	36	2 A33393	neuropeptide Y - l
24	141	72.7	97	2 JCI460	neuropeptide Y pre
25	140	72.2	96	2 B41979	neuropeptide Y pre
26	136	70.1	98	2 C41979	neuropeptide Y pre
27	135	69.6	93	2 YF0809	peptide YY - river
28	133	68.6	36	1 YF0809	peptide YY - short
29	133	68.6	104	2 I50808	neuropeptide Y pre

30	132	68.0	37	2 A26781	peptide YG - Ameri
31	122	62.9	36	2 S16943	neuropeptide Y - s
32	113	58.2	36	1 PCBO	pancreatic hormone
33	111	57.2	36	1 PCPG	pancreatic hormone
34	111	57.2	93	1 PCDG	pancreatic hormone
35	106	54.6	36	1 C61132	pancreatic hormone
36	106	54.6	36	2 C60071	pancreatic hormone
37	106	54.6	59	1 PCSH	pancreatic hormone
38	106	54.6	65	1 PCCT	pancreatic hormone
39	106	54.6	95	1 PCPU	pancreatic hormone
40	106	54.6	126	2 A28256	pancreatic hormone
41	105	54.1	36	1 A61132	pancreatic hormone
42	105	54.1	36	1 D61132	pancreatic hormone
43	104	53.6	36	2 B60413	pancreatic hormone
44	104	53.6	36	2 A28578	pancreatic hormone
45	103	53.1	36	2 J00365	pancreatic hormone

## ALIGNMENTS

RESULT 1  
A31358  
peptide YY - human  
C:Species: Homo sapiens (man)  
C:Date: 31-Mar-1990 #sequence\_revision 31-Dec-1991 #text\_change 17-Mar-1999  
C:Accession: A31358; A60676  
R:Ratamoto, K.; Nakano, I.; Makk, G.; Angwin, P.; Mann, M.; Schilling, J.; Go, V.L.W.  
Biochem. Biophys. Res. Commun. 157, 713-717, 1988  
A:Title: Isolation and primary structure of human peptide YY.  
A:Reference number: A31358; MUID:89076307  
A:Accession: A31358  
A:Molecule type: protein  
A:Residues: 1-36 <TRAP>  
A:Experimental source: colon  
R:Ederlein, G.A.; Eysselein, V.E.; Schaefer, M.; Layer, P.; Grant, D.; Goebell, H.;  
Peptides 10, 797-803, 1989  
A:Title: A new molecular form of PYY: structural characterization of human PYY(3-36)  
A:Reference number: A60676; MUID:90068171  
A:Accession: A60676  
A:Molecule type: protein  
A:Residues: 1-36 <EBR>  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; intestine; neuropeptide  
F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 100.0%; Score 194; DB 2; Length 36;  
Best Local Similarity 100.0%; Pred. No. 5e-19; 0; Indels 0; Gaps 0;  
Matches 36; Conservative 0; Mismatches 0

OY 1 YPIKPEAPGEDASPELNRYASLRHYLNTVTORRY 36  
DB 1 YPIKPEAPGEDASPELNRYASLRHYLNTVTORRY 36

RESULT 2  
S34569  
peptide YY precursor (clone L2) - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 02-Dec-1993 #sequence\_revision 13-Mar-1997 #text\_change 09-May-1997  
R:Kohli, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.  
Biochim. Biophys. Acta 1173, 345-349, 1993  
A:Title: Cloning and structural determination of human peptide YY cDNA and gene.  
A:Reference number: S33795; MUID:93305732  
A:Accession: S34569  
A:Status: Preliminary  
A:Molecule type: mRNA  
A:Residues: 1-90 <KOH>  
C:Superfamily: pancreatic hormone

Query Match 100.0%; Score 194; DB 2; Length 90;  
Best Local Similarity 100.0%; Pred. No. 1,4e-18;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36  
|||  
Db 29 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 64

RESULT 3  
S34568  
Peptide YY precursor (clone L1) - human (fragment)  
C:Species: Homo sapiens (man)  
C:Date: 02-Dec-1993 #sequence\_revision 13-Mar-1997 #text\_change 09-May-1997  
C:Accession: S34568  
R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.  
Biochim. Biophys. Acta 1173, 345-349, 1993  
A:Title: Cloning and structural determination of human peptide YY cDNA and gene.  
A:Reference number: S33795; MUID:93305732  
A:Accession: S34568  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-90 <KOH>  
Superfamily: pancreatic hormone

Query Match 100.0%; Score 194; DB 2; Length 90;  
Best Local Similarity 100.0%; Pred. No. 1,4e-18;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36  
|||  
Db 29 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 64

RESULT 4  
S33795  
Peptide YY (clone S) - human  
C:Species: Homo sapiens (man)  
C:Date: 19-Mar-1997 #sequence\_revision 19-Mar-1997 #text\_change 20-Jun-2000  
C:Accession: S33795  
R:Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.  
Biochim. Biophys. Acta 1173, 345-349, 1993  
A:Title: Cloning and structural determination of human peptide YY cDNA and gene.  
A:Reference number: S33795; MUID:93305732  
A:Accession: S33795  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-97 <KOH>  
A:Cross-references: GB:DL3897; NID:9391723; PIDN:BA002997.1; PID:9391724  
Superfamily: pancreatic hormone

Query Match 100.0%; Score 194; DB 2; Length 97;  
Best Local Similarity 100.0%; Pred. No. 1,5e-18;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36  
|||  
Db 29 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 64

RESULT 5  
YPIG  
Peptide YY - pig  
C:Species: Sus scrofa domestica (domestic pig)  
C:Date: 30-Apr-1982 #sequence\_revision 30-Apr-1982 #text\_change 23-Aug-1996  
C:Accession: A01574  
R:Atemoto, K.  
Proc. Natl. Acad. Sci. U.S.A. 79, 2514-2518, 1982  
A:Title: Isolation and characterization of peptide YY (PY), a candidate gut hormone the  
A:Reference number: A01574; MUID:82222168  
A:Accession: A01574

A:Molecule type: protein  
A:Residues: 1-36 <IAT>  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; hormone  
F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 94.8%; Score 184; DB 1; Length 36;  
Best Local Similarity 94.4%; Pred. No. 1e-17;  
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36  
|||  
Db 1 YPAKPEAPGEDASPEELSRYSASLRHYLNLVTRORY 36

RESULT 6  
A60416  
Peptide YY - dog  
C:Species: Canis lupus familiaris (dog)  
C:Date: 11-Feb-1993 #sequence\_revision 11-Feb-1993 #text\_change 17-Mar-1999  
C:Accession: A60416  
R:Esselein, V.E.; Eberlein, G.A.; Grandt, D.; Schaeffer, M.; Zehres, B.; Behn, U.; S.  
Peptides 11, 111-116, 1990  
A:Title: Structural characterization of canine PY.  
A:Reference number: A60416; MUID:90259843  
A:Accession: A60416  
A:Molecule type: protein  
A:Residues: 1-36 <EYS>  
C:Superfamily: pancreatic hormone  
C:Keywords: amidated carboxyl end; hormone; intestine  
F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 94.8%; Score 184; DB 2; Length 36;  
Best Local Similarity 94.4%; Pred. No. 1e-17;  
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36  
|||  
Db 1 YPAKPEAPGEDASPEELSRYSASLRHYLNLVTRORY 36

RESULT 7  
A29364  
Peptide YY precursor - rat  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 31-Dec-1988 #sequence\_revision 31-Dec-1988 #text\_change 16-Jul-1999  
C:Accession: A37955; A29364; J0416  
R:Krasinski, S.D.; Wheeler, M.B.; Leiter, A.B.  
Mol. Endocrinol. 5, 433-440, 1991  
A:Title: Isolation, characterization, and developmental expression of the rat peptide  
A:Reference number: A37955; MUID:91367188  
A:Accession: A37955  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-98 <KRA>  
A:Cross-references: GB:S57220; NID:9235283; PIDN:AA019752.1; PID:9235284  
R:Leiter, A.B.; Todter, A.; Wolfe, H.J.; Taylor, I.L.; Cooperman, S.; Mandel, G.; Good  
J. Biol. Chem. 262, 12984-12988, 1987  
A:Title: Peptide YY, structure of the precursor and expression in exocrine pancreas.  
A:Reference number: A29364; MUID:88007492  
A:Accession: A29364  
A:Molecule type: mRNA  
A:Residues: 1-98 <LEI>  
A:Cross-references: GB:M17523; NID:9204316; PIDN:AAA41222.1; PID:9204317  
R:Corder, R.; Gailhard, R.C.; Boehlen, P.  
Regul. Pept. 21, 253-261, 1988  
A:Title: Isolation and sequence of rat peptide YY and neuropeptide Y.  
A:Reference number: J0416; MUID:88321122  
A:Accession: J0416  
A:Molecule type: protein  
A:Residues: 29-64 <COR>

A:Experimental source: colon  
C:Superfamily: pancreatic hormone

Query Match 94.8%; Score 184; DB 2; Length 98;  
Best Local Similarity 94.4%; Pred. No. 3.3e-17;  
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YPIKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36  
DB 29 YPAKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 64

## RESULT 8

peptide YY precursor - bovine  
C:Species: Bos primigenius taurus (cattle)  
C>Date: 23-Mar-1995 #sequence\_revision 05-Apr-1995 #text\_change 16-Jul-1999

Accession: A55914

R:Herzog, H.; Hort, Y.; Schneider, R.; Shine, J.  
Proc. Natl. Acad. Sci. U.S.A. 92, 594-598, 1995

A:Title: Seminal plasma: recent evolution of another member of the neuropeptide Y gene

A:Reference number: A55914; MUID:95132646

A:Accession: A55914

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-97 <HER>

A:Cross-references: GB:L37369; NID:9565219; PIDN:AAC37326.1; PID:9567100

C:Genetics:

A:Introns: 63/2; 90/2

C:Superfamily: pancreatic hormone

C:Keywords: neuropeptide

Query Match 86.6%; Score 168; DB 2; Length 97;  
Best Local Similarity 83.3%; Pred. No. 4.2e-15;  
Matches 30; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1 YPIKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36  
DB 29 YPAKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 64

## RESULT 9

pancreatic peptide Y - alligator gar

Alternate names: pancreatic hormone Y

C:Species: Lepisosteus spatula (alligator gar)

C>Date: 30-Jun-1991 #sequence\_revision 30-Jun-1991 #text\_change 06-Dec-1996

C:Accession: S07215

R:Pollock, H.G.; Kimmel, J.R.; Hamilton, J.W.; Rouse, J.B.; Ebner, K.E.; Lance, V.; Rawl

Gen. Comp. Endocrinol. 67, 375-382, 1987

A:Title: Isolation and structures of alligator gar (Lepisosteus spatula) insulin and pan

A:Reference number: S07215; MUID:88030594

A:Accession: S07215

A:Molecule type: protein

A:Residues: 1-36 <POL>

C:Superfamily: pancreatic hormone

C:Keywords: amidated carboxyl end; hormone; pancreas

F:1-36/Product: pancreatic peptide Y #status experimental <PCH>

F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 80.4%; Score 156; DB 1; Length 36;  
Best Local Similarity 75.0%; Pred. No. 5.3e-14;  
Matches 27; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 1 YPIKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36  
DB 1 YPKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36

## RESULT 10

## PCDFY

pancreatic peptide Y - spiny dogfish

Alternate names: pancreatic hormone Y

C:Species: Squalus acanthias (spiny dogfish)

C>Date: 31-Mar-1993 #sequence\_revision 31-Mar-1993 #text\_change 16-Jun-2000

C:Accession: A60022; A56893

R:Pan, J.Z.; Shaw, C.; Halton, D.W.; Thim, L.; Johnston, C.F.; Fairweather, I.; Bucha

Regul. Pept. 35, 252, 1991

A:Title: Isolation and primary structure of peptide Y from the pancreas of the spiny

A:Reference number: A60022

A:Accession: A60022

A:Molecule type: protein

A:Residues: 1-36 <PAN1>

A>Note: this reference is an abstract

R:Pan, J.Z.; Shaw, C.; Halton, D.W.; Thim, L.; Johnston, C.F.; Buchanan, K.D.

Comp. Biochem. Physiol. B 102, 1-5, 1992

A:Title: The primary structure of peptide Y (PY) of the spiny dogfish, Squalus acanth

A:Reference number: A56893; MUID:92405520

A:Accession: A56893

A:Molecule type: protein

A:Residues: 1-36 <PAN2>

A:Experimental source: pancreas

A>Note: sequence extracted from NCBI backbone (NCBI:114876)

C:Superfamily: pancreatic hormone

C:Keywords: amidated carboxyl end; hormone; pancreas

F:1-36/Product: pancreatic peptide Y #status experimental <MAT>

F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 80.4%; Score 156; DB 1; Length 36;  
Best Local Similarity 75.0%; Pred. No. 5.3e-14;  
Matches 27; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 1 YPIKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36  
DB 1 YPKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36

RESULT 11

pancreatic peptide Y - smaller spotted catshark

Alternate names: neuropeptide Y-related peptide

C:Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted dogfish)

C>Date: 07-Apr-1994 #sequence\_revision 07-Apr-1994 #text\_change 07-May-1999

C:Accession: A49743

R:Conlon, J.M.; Balasubramaniam, A.; Hazen, N.

Endocrinology 120, 2273-2279, 1991

A:Title: Structural characterization and biological activity of a neuropeptide Y-rela

A:Reference number: A49743; MUID:91209266

A:Accession: A49743

A>Status: preliminary

A:Molecule type: protein

A:Residues: 1-36 <CON>

C:Superfamily: pancreatic hormone

C:Keywords: amidated carboxyl end; hormone

F:1-36/Product: pancreatic peptide Y #status experimental <MAT>

F:36/Modified site: amidated carboxyl end (Tyr) #status experimental

Query Match 80.4%; Score 156; DB 2; Length 36;  
Best Local Similarity 75.0%; Pred. No. 5.3e-14;  
Matches 27; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 1 YPIKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36  
DB 1 YPKPEAGGEDASPEELNRYASLRHLYNLVTQRQY 36

RESULT 12

pancreatic peptide Y - coho salmon

Alternate names: neuropeptide Y-related peptide

C:Species: Oncorhynchus kisutch (coho salmon)

C>Date: 31-Mar-1988 #sequence\_revision 31-Mar-1988 #text\_change 06-Dec-1996



Tue Jul 30 10:09:18 2002

us-10-016-969-2.rpr

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GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: July 30, 2002, 08:01:07 ; Search time 15.98 seconds  
(without alignments)  
87.228 Million cell updates/sec

Title: US-10-016-969-2  
Perfect score: 194  
Sequence: 1 YPIKPEAGEDASPELNRYASLRHLYLTVTRORY 36

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Database: 105224 seqs, 38719550 residues  
Total number of hits satisfying chosen parameters: 105224

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : SwissProt\_40:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	194	100.0	97 1 PYY_HUMAN	P10082 homo sapien
2	184	94.8	36 1 PYY_PIG	P01305 sus scrofa
3	184	94.8	93 1 PYY_MOUSE	Q09632 mus musculu
4	184	94.8	98 1 PYY_RAT	P10631 rattus norv
5	168	86.6	97 1 PYY_BOVIN	P16194 bos taurus
6	162	83.5	36 1 SPVY_PHYBI	P08952 phyllomedus
7	158	81.4	36 1 PYY_ZMICA	P29205 amia calva
8	156	80.4	36 1 PYY_LEPSP	P09473 lepisosteus
9	155	79.9	36 1 PYY_ONCKI	P09474 oncorhynch
10	154	79.4	97 1 PYY_RAJRH	P29206 raja rhina
11	154	79.4	97 1 PYY_BRARE	O91802 brachydanio
12	154	79.4	99 1 NEUY_DICLA	O91802 dicentrarch
13	153	78.9	36 1 NEUY_ONCKY	P29071 oncorhynch
14	153	78.9	36 1 PYY_RANRI	P29204 rana ridibu
15	152	78.4	36 1 NEUY_GADMO	P29204 gadus morhu
16	147	75.8	37 1 PYY_CHICK	P29203 gallus gall
17	147	75.8	96 1 NEUY_BRARE	O91803 brachydanio
18	147	75.8	97 1 NEUY_CHICK	P28673 gallus gall
19	146	75.3	36 1 NEUY_PIG	P01304 sus scrofa
20	144	74.2	36 1 NEUY_RABIT	P09640 oryctolagus
21	144	74.2	36 1 PYY_ORENT	P81020 oreochromis
22	144	74.2	97 1 NEUY_HUMAN	P01303 homo sapien
23	144	74.2	97 1 NEUY_MOUSE	P57774 mus musculu
24	144	74.2	98 1 NEUY_RAT	P07808 rattus norv
25	143	73.7	36 1 NEUY_SHEEP	P14765 ovis aries
26	141	72.7	36 1 NEUY_RANRI	P29249 rana ridibu
27	141	72.7	97 1 NEUY_XENLA	P33689 xenopus lae
28	140	72.2	96 1 NEUY_CARAU	P28672 carassius a
29	139	71.6	97 1 PYY_DICLA	O91802 dicentrarch
30	137	70.6	99 1 PYY_DICLA	O91802 dicentrarch
31	136	70.1	98 1 NEUY_TORMA	P28674 torpedo mar
32	135	69.6	93 1 PYY_LAMEFL	P48098 lampetra fi
33	133	68.6	36 1 PYY_MYOSC	P09641 myoxocephal

34	133	68.6	104 1 NEUY_LAMEFL	P48097 lampetra fi
35	132	68.0	69 1 PYY_IOPAM	P09475 lophius ame
36	122	62.9	36 1 PYY_PETMA	P80024 petromyzon
37	113	58.2	131 1 PAHO_BOVIN	P01302 bos taurus
38	111	57.2	36 1 PAHO_PIG	P01300 sus scrofa
39	111	57.2	93 1 PAHO_CANFA	P01299 canis faml
40	109	56.2	36 1 PAHO_CERST	P37999 ceratotheri
41	107	55.2	36 1 PAHO_LARAR	P41337 larus argen
42	106	54.6	36 1 PAHO_MACMU	P33684 macaca mla
43	106	54.6	36 1 PAHO_RABIT	P41336 oryctolagus
44	106	54.6	36 1 PAHO_TAPPI	P39659 tapirus pin
45	106	54.6	59 1 PAHO_SHEEP	P01301 ovis aries

## ALIGNMENTS

RESULT 1  
ID PYY\_HUMAN STANDARD; PRT; 97 AA.  
AC P10082;  
DT 01-MAR-1989 (Rel. 10, Created)  
DT 01-NOV-1995 (Rel. 32, Last sequence update)  
DT 16-OCT-2001 (Rel. 40, Last annotation update)  
DE Peptide YY precursor (PYY) (Peptide tyrosine tyrosine).  
GN PYY.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.  
OX NCBI\_TaxId=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE-Colon mucosa;  
RX MEDLINE=93305732; PubMed=8318545;  
RA Kohri K., Neta K., Yonekura H., Nagai A., Kono K., Okamoto H.;  
RT "Cloning and structural determination of human peptide YY cDNA and  
gene.";  
RL Biochim. Biophys. Acta 1173:345-349(1993).  
RN [2]  
RP SEQUENCE FROM N.A.  
RC TISSUE-Lymphocytes;  
RA Herzog H.;  
RX Submitted (NOV-1993) to the EMBL/GenBank/DBJ databases.  
RN [3]  
RP SEQUENCE OF 29-64, AND SYNTHESIS OF 29-64.  
RX MEDLINE=89076307; PubMed=3202875;  
RA Tatamoto K., Nakano I., Maki G., Angwin P., Mann M., Schilling J.,  
RT "Isolation and primary structure of human peptide YY.";  
RL Biochem. Biophys. Res. Commun. 157:713-717(1988).  
RN [4]  
RP SEQUENCE OF 29-64.  
RX MEDLINE=90068171; PubMed=2587421;  
RA Eberlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D.,  
RA Goebel H., Nibel W., Davis M., Lee T.D., Shively J.E.,  
RT "A new molecular form of PYY: structural characterization of human  
PYY(3-36) and PYY(1-36).";  
RL Peptides 10:797-803(1989).  
CC -!- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,  
HAS A VASOCONSTRICTOR ACTION AND INHIBITS JEJUNAL AND COLONIC  
MOTILITY.  
CC -!- SUBCELLULAR LOCATION: Secreted.  
CC -!- ALTERNATIVE PRODUCTS: 2 ISOFORMS: A LONG FORM (SHOWN HERE) AND A  
SHORT FORM. ARE PRODUCED BY ALTERNATIVE SPLICING.  
CC -!- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.  
CC -----  
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FT NON\_TER 93 93  
SQ SEQUENCE 93 AA: 10481 MW: 2320990F05992030 CRC64;

Query Match 94.8%; Score 184; DB 1; Length 93;  
Best Local Similarity 94.4%; Pred. No. 2.2e-18;  
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRORY 36  
DB 29 YPAKPEAPGEDASPEELNRYASLRHYNLVTRORY 64

RESULT 4  
PYR\_RAT STANDARD; PRT: 98 AA.  
AC P10631:  
01-JUL-1989 (Rel. 11, Created)  
01-JUL-1989 (Rel. 11, Last sequence update)  
16-OCT-2001 (Rel. 40, Last annotation update)  
DE Peptide YY precursor (PYY) (Peptide tyrosine tyrosine).  
GN PYY.  
OS Rattus norvegicus (Rat).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.  
OX NCBI\_TaxID=10116;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=88007492; PubMed=3654598;  
RA Leiter A.B., Toder A., Wolfe H.J., Taylor I.L., Cooperman S.,  
Mandel G., Goodman R.H., Taylor I.L., Cooperman S.,  
"Peptide YY. Structure of the precursor and expression in exocrine  
pancreas."  
RT J. Biol. Chem. 262:12984-12988(1987).  
RL [2]  
RN [2]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=91367188; PubMed=1890992;  
RA Krastinski S.D., Wheeler M.B., Leiter A.B.,  
"Isolation, characterization, and developmental expression of the rat  
peptide-YY gene."  
RT Mol. Endocrinol. 5:433-440(1991).  
RL [3]  
RN [3]  
RP SEQUENCE OF 29-64.  
RX MEDLINE=88321122; PubMed=3413293;  
RA Corder R., Galliard R.C., Boehlen P.,  
"Isolation and sequence of rat peptide YY and neuropeptide Y."  
Regul. Pept. 21:253-261(1988).  
RT -1- FUNCTION: THIS GUT PEPTIDE INHIBITS PANCREATIC SECRETION,  
HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC  
MOTILITY.  
CC -1- SUBCELLULAR LOCATION: Secreted.  
CC -1- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.  
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or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
CC EMBL: S57220; AAB19757.1; -  
DR EMBL: M17523; AAA1122.1; -  
DR PIR: A29364; A29364.  
DR PIR: A37955; A37955.  
DR HSSP: P01303; IROn.  
DR InterPro: IPR001955; Pancreatc\_hormn.  
DR Pfam: PF00159; hormone3; 1.  
DR PRINTS: PR00278; PANCHORMONE.  
DR PRODOM: PD001267; Pancreatc\_hormn; 1.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.

KW Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;  
Signal.  
FT SIGNAL 1 28  
FT SIGNAL 29 64  
FT PEPTIDE 29 64  
FT PROPEP 68 98  
FT MOD\_RES 64 64  
SQ SEQUENCE 98 AA: 11121 MW: 9940C03AD6A8A7DE CRC64;  
AMIDATION (G-65 PROVIDE AMIDE GROUP).

Query Match 94.8%; Score 184; DB 1; Length 98;  
Best Local Similarity 94.4%; Pred. No. 2.3e-18;  
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPEELNRYASLRHYNLVTRORY 36  
DB 29 YPAKPEAPGEDASPEELNRYASLRHYNLVTRORY 64

RESULT 5  
PYR\_BOVIN STANDARD; PRT: 97 AA.  
AC P31694;  
01-OCT-1996 (Rel. 34, Created)  
01-OCT-1996 (Rel. 34, Last sequence update)  
16-OCT-2001 (Rel. 40, Last annotation update)  
DE Peptide YY precursor (PYY) (Peptide tyrosine tyrosine).  
GN PYY.  
OS Bos taurus (Bovine).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
Bovidae; Bovinae; Bos.  
OX NCBI\_TaxID=9913;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=95132646; PubMed=7831336;  
RA Herzog H., Hort Y., Schneider R., Shine J.,  
"Seminaplasmin: recent evolution of another member of the  
neuropeptide Y gene family."  
RT Proc. Natl. Acad. Sci. U.S.A. 92:594-598(1995).  
RL -1- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,  
HAS A VASOCONSTRICTORY ACTION AND INHIBITS JEJUNAL AND COLONIC  
MOTILITY.  
CC -1- SUBCELLULAR LOCATION: Secreted.  
CC -1- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.  
CC This SWISS-PROT entry is copyright. It is produced through a collaboration  
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or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
CC EMBL: L37369; AAC37326.1; -  
DR HSSP: P01303; IROn.  
DR InterPro: IPR001955; Pancreatc\_hormn.  
DR Pfam: PF00159; hormone3; 1.  
DR PRINTS: PR00278; PANCHORMONE.  
DR PRODOM: PD001267; Pancreatc\_hormn; 1.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS50276; PANCREATIC\_HORMONE\_2; 1.  
KW Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;  
Signal.  
FT SIGNAL 1 28  
FT SIGNAL 29 64  
FT PEPTIDE 29 64  
FT PROPEP 68 97  
FT MOD\_RES 64 64  
SQ SEQUENCE 97 AA: 11092 MW: B3A7B6A768B3BAE0 CRC64;  
AMIDATION (G-65 PROVIDE AMIDE GROUP).  
Query Match 86.6%; Score 168; DB 1; Length 97;  
Best Local Similarity 83.3%; Pred. No. 3.5e-16;

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

RE SEQUENCE, AND STIMULUS.  
 RC SPECIES=S.canicula; TISSUE=Pancreas;  
 RX MEDLINE=91209266; Pubmed=2019251;  
 RA Conlon J.M., Balasubramanian A., Hazen N.;  
 RT "Structural characterization and biological activity of a  
 RT neuropeptide Y-related peptide from the dogfish, *Scyliorhinus*  
 RT canicula".  
 RL Endocrinology 128:2273-2279(1991).  
 RN [3]  
 RP SEQUENCE.  
 RC SPECIES=S.acanthias; TISSUE=Pancreas;  
 RA Pan J.-Z., Shaw C., Hailton D.W., Thim L., Johnston C.F.,  
 RA Falwasser I., Buchanan K.D.;  
 RT "Isolation and primary structure of the peptide Y from the rainbow  
 RT trout, *Oncorhynchus mykiss* (Walbaum)".  
 RL Endocrinology 128:2273-2279(1991).  
 RN [3]



**PY.**

NS Brachydanio rerio (Zebrafish) (zebra danio).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Ostariophysi;  
OC Cypriniformes; Cyprinidae; Danio.  
ON NCBI\_TaxID=7955;

RN [1]  
RN SEQUENCE FROM N.A.  
RA Soderberg C., Wraith A., Ringvall M., Yan Y., Postlethwait J.H.,  
RA Brodin L., Larhammar D.;  
RT "Zebrafish genes for neuropeptide y and peptide yy reveal origin by  
chromosome duplication from an ancestral gene linked to the homeobox  
cluster.";  
RL Submitted (FEB-2000) to the EMBL/genbank/DDJ database.  
CC -I- SUBCELLULAR LOCATION: Secreted  
CC -I- SIMILARITY: BELONGS TO THE NPV / PPY / PYR FAMILY.  
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EMBL AF23875; AAF79942.1; -.  
HSSP: P01303; IRON.  
DR ZFIN: ZDB-GENE-980526-71; PYU.  
DR InterPro: IPR001955; Pancreatlic\_hormn.  
DR Pfam: PF00159; hormone3\_1.  
DR PRINTS: PRD00278; PANCHORMONE.  
DR ProDom: PD001267; Pancreatlic\_hormn; 1.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS0276; PANCREATIC\_HORMONE\_2; 1.  
KW Hormone; cleavage on pair of basic residues; amidation; signal;  
KV Neuropeptide.  
FT SIGNAL 1 28 POTENTIAL.  
FT CHAIN 29 64 PEPTIDE YY.  
FT PROPEP 68 97 C-TERMINAL EXTENSION (BY SIMILARITY).  
FT MOD\_RES 64 64 AMIDATION (G-65 PROVIDE AMIDE GROUP)  
  
SEQUENCE 97 AA; 11175 MW; 96EA07EF0991AC2D CRC64;  
  
Query Match 79.4%; Score 154; DB 1; Length 97;  
Best Local Similarity 72.2%; Pred. No. 2.8e-14;  
Matches 26; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

OY 1 YPIKEPAFGEDASPELLNNYYASHLYHNLVLTROYRY 36  
O |||||:::|||::| |::|::|::|::|:  
OB 29 VPKRPENPGDDAPAEELAKYTATLAHYTNLIITROXT 64

RESULT 12  
NEUY\_DICLA STANDARD; FRQ; 99 AA.  
AC NEUPAO; OGP797;  
DT 16-OCT-2001 (Rel. 40, Created)  
DT 16-OCT-2001 (Rel. 40, Last sequence update)  
DI 01-MAR-2002 (Rel. 41, Last annotation update)  
DE Neuropeptide y precursor (NPY).  
GN NPY.  
OS Dicentrarchus labrax (European sea bass).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;  
OC Acanthomorphia; Acanthopterygii; Percromorpha; Perciformes; Percoidae;  
OW Moronidae; Dicentrarchus.  
OX NCBI\_TaxID=13489;  
GX [1]  
KP SEQUENCE FROM N.A.  
KC TISSUE-Brain.  
CA Cerda-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.,

RA	Larhammar D.;
RT	*Neuropeptide Y, endocrine gut peptide YY and fish pancreatic peptide
RT	Y expression in the brain of a teleost fish ( <i>Dicentrarchus labrax</i> ):
RL	from cloning to evolutionary considerations.*;
RL	Submitted (Apr-1998) to the EMBL/GenBank/DDBJ databases.
RN	[2]
RP	SEQUENCE OF 1-62 FROM N.A.
RC	TISSUE=Blood;
RA	Cerdas-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.,
RA	Larhammar D.;
RT	"Deduced peptide sequence of neuropeptide Y exon 2 from sea bass
RT	( <i>Dicentrarchus labrax</i> ).";
RL	Submitted (Apr-1998) to the EMBL/Genbank/DDBJ databases.
CC	-I- FUNCTION: NPV IS IMPLICATED IN THE CONTROL OF FEEDING AND IN
CC	SECRETION OF GONADOTROPIN-RELEASE HORMONE.
CC	-I- SUBCELLULAR LOCATION: Secreted.
CC	-I- SIMILARITY: BELONGS TO THE NPV / PPV / PYY FAMILY.
CC	
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CC	-----
DR	EMBL; AJ005378; CAB64932.1; -;
DR	EMBL; AJ005381; CAB64935.1; -;
DR	HSPB; P01303; IRON.
DR	InterPro: IPR001955; Pancreatic_horm.
DR	Pfam: PF00159; hormones; 1.
DR	PRINTS; PR002278; PANCHORHONE.
DR	ProDom: PD001267; Pancreatlc_horm; 1.
DR	SMART; SM00309; PAH; 1.
DR	PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
DR	PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
DR	KM Neuropeptide; Cleavage on pair of basic residues; Signal; Amidation.
FT	SIGNAL 1 28
FT	PEPTIDE 29 64 BY SIMILARITY.
FT	PROPEP 68 99 NEUROPEPTIDE Y.
FT	MOD_RES 64 64
SO	SEQUENCE 99 AA; 11260 MW; 4EEFAED164964184 CRC64;
	Query Match 79.4%; Score 154; DB 1; Length 99;
	Best Local Similarity 72.2%; Pred. No. 2.9e-14;
	Matches 26; Conservative 6; Mismatches 4; Indels 0; Gaps 0;
Oy	1 YPIKPEAFGEADSPSELNRRYASLRHYNYLVTRYKY 36
	:  ::   ::   ::
Db	29 YPKENFGEADPADELAKEYSALRHYNLITTRYKY 64
RESULT 13	
ID NEWY_ONCMY STANDARD; PRT; 36 AA.	
AC P29071;	
DT 01-DEC-1992 (Rel. 24, Created)	
DT 01-DEC-1992 (Rel. 24, Last sequence update)	
DT 01-MAR-2002 (Rel. 41, Last annotation update)	
DE Neuropeptide Y (NPY).	
GN NPY.	
OS Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).	
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;	
OC Proactinopterygii; Salmoniformes; Salmonidae; Oncorhynchus.	
OX NCBI_TaxID=8022;	
RN [1]	
RP SEQUENCE.	
RC TISSUE=Brain;	
RX MEDLINE=93092973; PubMed=1459125;	
RA Jensen J., Conlon J.M.;	
RT "Characterisation of peptides related to neuropeptide tyrosine and	



Tue Jul 30 10:09:18 2002

us-10-016-969-2.rsp

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: July 30, 2002, 08:00:37 ; Search time 44.26 Seconds  
(without alignments)  
140.710 Million cell updates/sec

Title: US-10-016-969-2

Perfect score: 194

Sequence: 1 YPIKPEAPGEDASPEELNRYASLRHYLNLYTRORY 36

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Database: 562222 seqs, 172994929 residues

Total number of hits satisfying chosen parameters: 562222

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: SP archaea:\*  
2: SP bacteria:\*  
3: SP fungi:\*  
4: SP human:\*  
5: SP\_invertebrate:\*  
6: SP\_mammal:\*  
7: SP\_mhc:\*  
8: SP\_organelle:\*  
9: SP\_phage:\*  
10: SP\_plant:\*  
11: SP\_rodent:\*  
12: SP\_virus:\*  
13: SP\_vertebrate:\*  
14: SP\_unclassified:\*  
15: SP\_virus:\*  
16: SP\_bacteriaph:\*  
17: SP\_archaeap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match length	DB ID	Description
1	188	96.9	36 6 09TR93	09tr93 oryctolagus
2	184	94.8	98 11 091XDO	091xd0 mus musculu
3	176	90.7	97 6 09TR92	09tr92 oryctolagus
4	154	79.4	97 13 0918P2	0918p2 brachydano
5	151	77.8	99 13 090WF4	090wf4 paralichthy
6	149	76.8	95 13 0919D3	0919d3 ictalurus p
7	147	75.8	96 13 09DGK7	09dgk7 cypripus ca
8	147	75.8	96 13 0918P3	0918p3 brachydano
9	146	75.3	76 6 09NOM5	09nom5 sus scrofa
10	144	74.2	97 6 09XSW6	09xsw6 macaca mula
11	143	73.7	89 11 0925V2	0925v2 mus musculu
12	143	73.7	90 6 09TS16	09ts16 ovis aries
13	141	72.7	97 13 09PM68	09pm68 typhloocte
14	141	72.7	99 13 090WF3	090wf3 paralichthy
15	136	70.1	36 13 09PS46	09ps46 scyllorhinu
16	132	68.0	97 13 090WF2	090wf2 paralichthy

17	98	50.5	59 6 09GKL0	09gkl0 sus scrofa
18	69	35.6	21 13 09PS51	09ps51 lampetra fl
19	67	34.5	33 4 09NR16	09nr16 homo sapien
20	63	32.5	89 5 09UOS9	09uos9 lymnaea sta
21	59	30.4	92 5 027441	027441 aplysia cal
22	58	29.9	77 16 097092	097q92 streptococ
23	58	29.9	621 12 038017	038017 salmomid be
24	56.5	29.1	504 8 09TM13	09tm13 cyanidium c
25	56.5	29.1	734 3 09P3S1	09p3s1 neurospora
26	56.5	29.1	6420 2 09S814	09s814 streptomyc
27	55	28.4	380 4 09V4Y0	09v4y0 homo sapien
28	55	28.4	1374 4 09NRR4	09nrr4 homo sapien
29	54.5	28.1	356 2 09L2L8	09l2l8 streptomyc
30	54.5	28.1	359 3 09C439	09c439 pneumocysti
31	54	27.8	469 5 09V5H6	09v5h6 drosophila
32	54	27.8	501 4 0960U5	0960u5 homo sapien
33	54	27.8	501 4 0961X5	0961x5 homo sapien
34	53.5	27.6	377 3 096MX4	096mx4 pneumocysti
35	53.5	27.6	935 11 091XY1	091xy1 mus musculu
36	53	27.3	321 17 09YD78	09y478 aeropyrum p
37	53	27.3	325 4 09NM90	09nm90 homo sapien
38	53	27.3	453 4 096G51	096g51 homo sapien
39	53	27.3	530 5 016850	016850 caenorhabd
40	53	27.3	835 4 096C69	096c69 homo sapien
41	53	27.3	872 2 054307	054307 streptomyc
42	53	27.3	1145 11 09DBV3	09dbv3 mus musculu
43	53	27.3	1564 4 014160	014160 homo sapien
44	52.5	27.1	114 10 09XH20	09xh20 arabidopsi
45	52.5	27.1	811 4 09UN65	09un65 homo sapien

## ALIGNMENTS

RESULT 1  
ID 09TR93 PRELIMINARY; PRT; 36 AA.  
AC 09TR93;  
DT 01-MAY-2000 (TREMBLrel. 13, Created)  
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
DT 01-OCT-2001 (TREMBLrel. 18, Last annotation update)  
DE PEPTIDE YR, PYY(1-36).  
OS Oryctolagus cuniculus (Rabbit).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.  
OX NCBI\_TaxID=9986;  
RN [1]  
RP SEQUENCE.  
RX MEDLINE=95075735; PubMed=7984499;  
RA Grandt D., Schimczek M., Struk R., Shively J., Eysselein V.E.,  
RA Goebell H., Reeve J.R., Jr.;  
RT "Characterization of two forms of peptide YR, PYY(1-36) and PYY(3-36),  
RT in the rabbit."  
RL Peptides 15:815-820(1994).  
CC -I- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.  
DR HSP: P01303; IRON.  
DR InterPro: IPR001955; Pancreatic\_horm.  
DR Pfam: PF00159; hormone3; 1.  
DR PRINTS: PR00278; PANCORHONE.  
DR ProDom: PD001267; Pancreatic\_horm; 1.  
DR SMART: SM00305; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS00276; PANCREATIC\_HORMONE\_2; 1.  
KW Amidation.  
SQ SEQUENCE 36 AA: 4285 MW: 02D499C808DC8D CRC64;

Query Match 96.9%; Score 188; DB 6; Length 36;  
Best Local Similarity 97.2%; Pred. No. 5e-18;  
Matches 35; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
1 YPIKPEAPGEDASPEELNRYASLRHYLNLYTRORY 36  
|||

Db 1 YPSKPEAPGEDASPELNRYYASLRHYLNLVTRORY 36

RESULT 2  
ID Q91XD0 PRELIMINARY: PRT; 98 AA.  
AC Q91XD0;  
DT 01-DEC-2001 (TREMBLrel. 19, Created)  
DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)  
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
DE UNKNOWN (PROTEIN FOR MGC:19143).  
OS Mus musculus (Mouse).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
OX NCBI\_TaxID=10090;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=COLON;  
RA Strausberg R.;  
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; BC010821; AAH10821.1; -  
SEQUENCE 98 AA; 11064 MW; 7AF165A1052C3249 CRC64;

Query Match 94.8%; Score 184; DB 11; Length 98;  
Best Local Similarity 94.4%; Pred. No. 5.2e-17;  
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPELNRYYASLRHYLNLVTRORY 36  
DB 29 YPKPEAPGEDASPELNRYYASLRHYLNLVTRORY 64

RESULT 3  
ID Q9TR92 PRELIMINARY: PRT; 34 AA.  
AC Q9TR92;  
DT 01-MAY-2000 (TREMBLrel. 13, Created)  
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)  
DT 01-OCT-2001 (TREMBLrel. 18, Last annotation update)  
DE PEPTIDE YY, PYY(3-36).  
OS Oryctolagus cuniculus (Rabbit).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.  
OX NCBI\_TaxID=9986;  
RN [1]  
RP SEQUENCE.  
RA MEDLINE=95075735; PubMed=7984499;  
RA Grandt D., Schiniczek M., Struk K., Shively J., Eysselein V.E.,  
Goebell H., Reeve J.R., Jr.;  
RT "Characterization of two forms of peptide YY, PYY(1-36) and PYY(3-36),  
in the rabbit."  
RL Peptides 15:815-820(1994).  
CC -1- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.  
DR HSSP: P01303; IRON.  
DR InterPro: IPR001955; Pancreatic\_hormn.  
DR Pfam: PF00159; hormones; 1.  
DR ProDom: PD001267; Pancreatic\_hormn; 1.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS00276; PANCREATIC\_HORMONE\_2; 1.  
KW Amidation.  
SQ SEQUENCE 34 AA; 4024 MW; 02D4E9C38BA5FC8D CRC64;

Query Match 90.7%; Score 176; DB 6; Length 34;  
Best Local Similarity 100.0%; Pred. No. 1.9e-16;  
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4 KPEAPGEDASPELNRYYASLRHYLNLVTRORY 36  
DB 2 KPEAPGEDASPELNRYYASLRHYLNLVTRORY 34

RESULT 4  
ID Q918P2 PRELIMINARY: PRT; 97 AA.  
AC Q918P2;  
DT 01-OCT-2000 (TREMBLrel. 15, Created)  
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)  
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
DE PEPTIDE YY PRECURSOR.  
GN PYY.  
OS Brachydanio rerio (Zebrafish) (Zebra danio).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Ostariophysi;  
OC Cypriniformes; Cyprinidae; Danio.  
OX NCBI\_TaxID=7955;  
RN [1]  
RP SEQUENCE FROM N.A.  
RA Soderberg C., Wraith A., Ringvall M., Yan Y., Postlethwait J.H.,  
RA Brodin L., Larnhammar D.;  
RT "Zebrafish genes for neuropeptide Y and peptide YY reveal origin by  
chromosome duplication from an ancestral gene linked to the homeobox  
cluster."  
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.  
CC -1- SIMILARITY: BELONGS TO THE NPY / PYY / PYY FAMILY.  
DR EMBL; AF233875; AAF79942.1; -  
DR HSSP: P01303; IRON.  
DR ZFIN: ZDB-GENE-980526-71; PYY.  
DR InterPro: IPR001955; Pancreatic\_hormn.  
DR Pfam: PF00159; hormones; 1.  
DR PRINTS: PR00278; PANCREATIC\_HORMONE.  
DR ProDom: PD001267; Pancreatic\_hormn; 1.  
DR SMART: SM00309; PAH; 1.  
DR PROSITE: PS00265; PANCREATIC\_HORMONE\_1; 1.  
DR PROSITE: PS00276; PANCREATIC\_HORMONE\_2; 1.  
KW Amidation; Signal.  
FT SIGNAL 1 28  
FT CHAIN 29 64  
FT PEPTIDE YY  
SQ SEQUENCE 97 AA; 11175 MW; 96EA07EF091AC2D CRC64;

Query Match 79.4%; Score 154; DB 13; Length 97;  
Best Local Similarity 72.2%; Pred. No. 5e-13;  
Matches 26; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

OY 1 YPIKPEAPGEDASPELNRYYASLRHYLNLVTRORY 36  
DB 29 YPKPEAPGEDASPELNRYYASLRHYLNLVTRORY 64

RESULT 5  
ID Q90WF4 PRELIMINARY: PRT; 99 AA.  
AC Q90WF4;  
DT 01-DEC-2001 (TREMBLrel. 19, Created)  
DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)  
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)  
DE NEUROPEPTIDE Y.  
GN NPY.  
OS Parulichthys olivaceus (Flounder).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;  
OC Acanthomorpha; Acanthopterygii; Percomorphi; Pleuronectiformes;  
OC Pleuronectoidi; Parulichthyidae; Parulichthys.  
OX NCBI\_TaxID=8255;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=BRAIN;  
RA Kurokawa T., Suzuki T.;  
RT "Development of neuropeptide Y related peptides in the digestive  
organs during the larval stage of Japanese flounder, Parulichthys  
olivaceus."  
RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AB055211; BAB62409.1; -



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RESULT 9
Q9NOM5 PRELIMINARY; PRT; 76 AA.
AC Q9NOM5;
DT 01-OCT-2000 (TREMBlrel. 15, Created)
DT 01-OCT-2000 (TREMBlrel. 15, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE PRONEUROPEPTIDE Y (FRAGMENT).
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID=9823;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=HYPOPHALAMUS;
RA Matteri R.L.;
RL Submitted (MAY-2000) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
DR EMBL: AF264083; AAF72538.1; -.
DR HSSP: P01303; IRON.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormones; 1.
DR PRINTS: PR00278; PANCCHORMONE.
DR PRODOM: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_2; 1.
DR PROSITE: PS50276; PANCREATIC_HORMONE_2; 1.
KW Amidation.
SQ SEQUENCE 76 AA; 8596 MW; 84E40EC2AF94B2C CRC64;
FT CHAIN 1
FT NON_TER 10 >45 NEUROPEPTIDE Y.
FT SEQUENCE 76 76

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Query Match 75.3%; Score 146; DB 6; Length 76;
Best Local Similarity 69.4%; Pred. No. 4.4e-12;
Matches 25; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

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```

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36
Db 10 YPSKPDNGEDAPADRMARYSALRHYNLITRORY 45
RESULT 10
Q9XSW6 PRELIMINARY; PRT; 97 AA.
AC Q9XSW6;
DT 01-NOV-1999 (TREMBlrel. 12, Created)
DT 01-NOV-1999 (TREMBlrel. 12, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE NEUROPEPTIDE Y.
OS Macaca mulatta (Rhesus macaque).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
Cercopithecinae; Macaca.
NCBI_TaxID=9544;
RN [1]
RP SEQUENCE FROM N.A.
RA Adler L.A., Golos T.G., Terasawa E.;
RT "Developmental changes in NPY mRNA expression in female rhesus
monkeys."
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
DR EMBL: AF162280; AAD43583.1; -.
DR HSSP: P01303; IRON.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormones; 1.
DR PRINTS: PR00278; PANCCHORMONE.
DR PRODOM: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.
DR PROSITE: PS50276; PANCREATIC_HORMONE_2; 1.

```

```

KW Amidation.
SQ SEQUENCE 97 AA; 10840 MW; 2D2209BAC20BD5EE CRC64;
FT CHAIN 1
FT NON_TER 10 >45 NEUROPEPTIDE Y.
FT SEQUENCE 97 97

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Query Match 74.2%; Score 144; DB 6; Length 97;
Best Local Similarity 66.7%; Pred. No. 1.1e-11;
Matches 24; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

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QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36
Db 29 YPSKPDNGEDAPADRMARYSALRHYNLITRORY 64
RESULT 12
Q9TSI6 PRELIMINARY; PRT; 90 AA.
AC Q9TSI6;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE NEUROPEPTIDE Y (FRAGMENT).
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
Bovidae; Caprinae; Ovis.
NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RA Simmons J.M., Daniel J.A., Matteri R.L., Keisler D.H.;
RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
DR EMBL: AF095782; AAC69886.1; -.
DR HSSP: P01303; IRON.
DR InterPro: IPR001955; Pancreatic_hormn.
DR Pfam: PF00159; hormones; 1.
DR PRINTS: PR00278; PANCCHORMONE.
DR PRODOM: PD001267; Pancreatic_hormn; 1.
DR SMART: SM00309; PAH; 1.
DR PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.

```

Search completed: July 30, 2002, 08:06:41  
Job time: 364 sec

Tue Jul 30 10:09:18 2002

us-10-016-969-2.rspt

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: July 30, 2002, 08:00:32 ; Search time 51.48 Seconds  
(without alignments)  
73.359 Million cell updates/sec

Title: US-10-016-969-3

Perfect score: 180  
Sequence: 1 IKPEAPGEDASPEELNRYASLRHLYLVTRQRY 34

Scoring table:  
BLOSUM62  
Gapop 10.0 , Gapext 0.5

arched: 747574 seqs, 111073796 residues

Total number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database :

A.GeneSeq\_032802:\*

- 1: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1980.DAT:\*
- 2: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1981.DAT:\*
- 3: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1982.DAT:\*
- 4: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1983.DAT:\*
- 5: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1984.DAT:\*
- 6: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1985.DAT:\*
- 7: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1986.DAT:\*
- 8: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1987.DAT:\*
- 9: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1988.DAT:\*
- 10: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1989.DAT:\*
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- 16: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1995.DAT:\*
- 17: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1996.DAT:\*
- 18: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1997.DAT:\*
- 19: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1998.DAT:\*
- 20: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1999.DAT:\*
- 21: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2000.DAT:\*
- 22: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2001.DAT:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	180	100.0	34	22	AAB91224
2	180	100.0	36	15	AAR62050
3	180	100.0	36	17	AAR97741
4	180	100.0	36	19	AAW51801
5	180	100.0	36	20	AAV43335
6	180	100.0	36	21	AAAB12178
7	180	100.0	36	21	AAV87961
8	180	100.0	36	21	AAV87550
9	180	100.0	36	22	AAB91223
10	180	100.0	36	22	AAU06188
11	180	100.0	97	21	AAAB08020

12	180	100.0	176	22	AAG75364	Human colon cancer
13	174	96.7	36	22	AAB91109	Parathyroid hormon
14	171	95.0	36	15	AAR62049	Porcine peptide YY
15	171	95.0	36	17	AAR97740	Porcine peptide YY
16	171	95.0	36	18	AAW15365	Porcine peptide YY
17	171	95.0	36	19	AAW51800	Porcine peptide YY
18	171	95.0	36	21	AAV87549	Porcine peptide YY
19	171	95.0	36	22	AAB91225	Peptide YY SEQ ID
20	171	95.0	36	22	AAB91226	Peptide YY SEQ ID
21	171	95.0	36	22	AAU06187	Porcine peptide YY
22	166	92.2	36	11	AAR07278	Peptide small inte
23	162	90.0	36	19	AAW51808	Porcine small inte
24	156	86.7	36	11	AAR07277	Porcine small inte
25	155	86.1	36	11	AAR07276	Neutrophil-activat
26	155	86.1	36	20	AAV50293	Pancreatic polypep
27	144	80.0	36	22	AAB91222	Neuropeptide Y ago
28	143	79.4	36	16	AAR87890	Porcine neuropepti
29	134	74.4	36	17	AAW06955	Porcine neuropepti
30	134	74.4	36	17	AAR97743	Rat and porcine ne
31	134	74.4	36	21	AAV51550	Porcine/rat neurope
32	134	74.4	36	22	AAB97621	Human neuropeptide
33	132	73.3	36	17	AAR97742	Peptide Y analogu
34	132	73.3	36	19	AAW51823	Human neuropeptide
35	132	73.3	36	21	AAV51549	Human neuropeptide
36	132	73.3	36	22	AAE06684	Human neuropeptide
37	132	73.3	36	22	AAB97620	Neuropeptide Y pep
38	132	73.3	36	22	AAB91213	Human neuropeptide
39	132	73.3	36	22	AAU06195	Mammalian neuropep
40	132	73.3	70	22	AAE09439	Human sbghprya pro
41	132	73.3	97	20	AAV43334	Neuropeptide Y. S
42	132	73.3	97	20	AAV23828	Human prepro-neuro
43	132	73.3	97	21	AAB35660	Human neuropeptide
44	132	73.3	97	21	AAV57078	Human neuropeptide
45	132	73.3	97	22	AAE07919	Human neuropeptide

#### ALIGNMENTS

RESULT 1	
AAB91224	
ID AAB91224 standard; Peptide: 34 AA.	
XX	
AC AAB91224:	
XX	
DT 22-JUN-2001 (first entry)	
XX	
DE Peptide YY SEQ ID NO:398.	
XX	
KW Protection; endogenous therapeutic peptide; peptidase; conjugation;	
KW blood component; modification; succinimidylyl; maleimido group; amino;	
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.	
XX	
OS Homo sapiens.	
OS Synthetic.	
XX	
PN WC200069900-A2.	
XX	
ED 23-NOV-2000.	
XX	
PF 17-MAY-2000; 2000WC-US13576.	
XX	
PR 17-MAY-1999; 99US-0134406.	
PR 10-SEP-1999; 99US-0153406.	
PR 15-OCT-1999; 99US-0159783.	
XX	
PA (CONJ-) CONJUCHEM INC.	
PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;	
XX WPI: 2001-112059/12.	
XX	
PT Modifying and attaching therapeutic peptides to albumin prevents	

PT peptidase degradation, useful for increasing length of in vivo activity

XX Disclosure; Page 328; 733pp; English.

XX The present invention describes a modified therapeutic peptide (I)

CC comprising a therapeutically active amino acid region (III) and a

CC reactive group (II) (e.g. succinimide) and maleimido groups) attached to

CC a less therapeutically active amino acid region (IV), which covalently

CC bonds with amino/hydroxyl/thiol groups on blood components to form a

CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.

CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth

CC factors and neurotransmitters, to protect them from peptidase activity

CC in vivo for the treatment of various disorders. Endogenous therapeutic

CC peptides are not suitable as drug candidates as they require frequent

CC administration due to rapid degradation by peptidases in the body.

CC Modifying and attaching therapeutic peptides to albumin prevents or

CC reduces the action of peptidases to increase length of activity (half

CC life) and specificity as bonding to large molecules decreases

CC intracellular uptake and interference with physiological processes.

CC AAB90829 to AAB92441 represent peptides which can be used in the

CC exemplification of the present invention.

SQ Sequence 34 AA;

#### Query Match

Best Local Similarity 100.0%; Score 180; DB 22; Length 34;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 34  
1 ikpeapgedaspeelnryaslrhylnlvtrqry 34

#### RESULT 2

AA62050  
ID AAR62050 standard; peptide; 36 AA.

AC AAR62050;

DT 14-JUN-1995 (first entry)

DE Human peptide YY (PYY).

XX Peptide YY; PYY; gastro-enterological disorders; intestinal water;  
KW electrolyte secretion; cell proliferation; nutrient transport;  
KW lipolysis; blood flow regulation.

XX Homo sapiens.

XX WO9422467-A.

XX 13-OCT-1994.

XX 29-MAR-1994; 94WO-US03380.

XX 29-MAR-1993; 93US-0038534.

XX 19-AUG-1993; 93US-0109326.

XX (UYCI-) UNIV CINCINNATI.

XX Balasubramaniam A;

XX WPI; 1994-332815/41.

XX New peptide derivs. - useful as therapeutic agents, for treating  
XX gastro-enterological disorders

XX Disclosure; Page 3; 45pp; English.

XX AAR62050 describes the amino acid sequence of human peptide YY  
XX (PYY), which was isolated from the endocrine cells of the human

CC gastrointestinal tract and pancreas. Using the equivalent porcine

CC PYY sequence (AAR62049) as a base the PYY analogues described in

CC AAR62051-R62082 were produced. The new peptides were found to have

CC a variety of properties, that made them useful as therapeutic

CC agents in the treatment of gastro-enterological disorders. As part

CC of a therapeutic composition they could be used for decreasing

CC excess intestinal water and electrolyte secretion, for regulating

CC cell proliferation and augmenting nutrient transport, and for

CC regulating lipolysis and blood flow.

SQ Sequence 36 AA;

#### Query Match

Best Local Similarity 100.0%; Score 180; DB 15; Length 36;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 34  
3 ikpeapgedaspeelnryaslrhylnlvtrqry 36

#### RESULT 3

AA62741  
ID AAR62741 standard; peptide; 36 AA.

AC AAR62741;

DT 10-JAN-1997 (first entry)

DE Human peptide YY.

XX Peptide YY; PYY; porcine; human; intestine; endocrine cell; gut motility;  
KW gastrointestinal tract; pancreas; inhibitor; intestinal secretion; pig;  
KW pancreatic tumour; blood flow; serous cyst adenoma; microcystic tumour;  
KW solid-cyst tumour; malignant tumour; therapy.

XX Homo sapiens.

XX WO9614854-A1.

XX 23-MAY-1996.

XX 03-NOV-1995; 95WO-US14303.

XX 14-NOV-1994; 94US-0338395.

XX (REGC ) UNIV CALIFORNIA.

XX Mcfadden DW;

XX WPI; 1996-259558/26.

XX Use of peptide YY and its agonists to treat pancreatic tumours -  
XX either in vitro or in vivo to reduce tumour cell proliferation

XX Disclosure; Page 3; 22pp; English.

XX AAR62740 and AAR62741 represent porcine and human peptide YY (PYY)  
XX respectively. This sequence is isolated from intestine, and is  
XX localised in the endocrine cells of the gastrointestinal tract and the  
XX pancreas. PYY is thought to inhibit gut motility and blood flow, to  
XX mediate intestinal secretion, and stimulate net absorption. These  
XX sequences, and agonists against them (see AAR62742-R62744), can be used  
XX in the method of the invention. The method of the invention is for  
XX inhibiting pancreatic tumours by contacting them with an effective amount  
XX of one of these sequences. The method is effective in treating both  
XX benign and malignant pancreatic tumours. The types of benign tumour  
XX pancreatic tumours that can be treated, include, serous cyst adenomas,  
XX microcystic tumours, and solid-cyst tumours. The malignant tumours  
XX capable of being treated by the method of the invention include,  
XX carcinomas arising from the ducts, acini, or islets of the pancreas.

SQ Sequence 36 AA:

Query Match 100.0%; Score 180; DB 17; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 4e-19;  
 Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 34  
 |||||  
 Db 3 ikpeapedaspeelnyaslrhylnlvtrqry 36

RESULT 4

ID AAW51801 standard; peptide: 36 AA.

AAW51801;

13-OCT-1998 (first entry)

Human peptide YY.

peptide YY; cell proliferation; nutrient transport; lipolysis;  
 electrolyte secretion; anti-secretory; intestinal water; antidiarrhoea.

Homo sapiens.

MO9820885-A1.

22-MAY-1998.

13-NOV-1996; 96MO-US18374.

13-NOV-1996; 96MO-US18374.

(UYCI-) UNIV CINCINNATI.

Balasubramaniam A;

WPI: 1998-322327/28.

New analogue(s) of peptide YY - used, e.g. to control cell  
 proliferation, nutrient transport, lipolysis and intestinal water  
 and electrolyte secretion

Disclosure: Page 3; 54pp; English.

The invention relates to peptide YY analogues which may be used e.g. for  
 decreasing excess intestinal water and electrolyte secretion in mammals,  
 to regulate cell proliferation (especially intestinal cell  
 proliferation), to increase nutrient transport, to regulate lipolysis  
 and to regulate blood flow. The peptides exhibit antidiarrhoeal and  
 antidiarrhoeal properties and are especially useful in treatment of  
 gastrointestinal disorders associated with excess intestinal electrolyte  
 and water secretion as well as decreased absorption. The new peptides  
 are truncated versions of peptide YY. They interact solely with peptide  
 YY receptors and not with homologous receptors such as NPY Y1 and Y3,  
 thus minimising unwanted (antagonist) side reactions. The present  
 sequence represents human peptide YY.

SQ Sequence 36 AA:

Query Match 100.0%; Score 180; DB 19; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 4e-19;  
 Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 34  
 |||||  
 Db 3 ikpeapedaspeelnyaslrhylnlvtrqry 36

RESULT 5

AAV43335

ID AAV43335 standard; peptide: 36 AA.

AC AAV43335;

25-JAN-2000 (first entry)

Peptide Y.

Neuropeptide Y; NPY; agonist; peptide YY; PYY; airway restriction;  
 bronchial disease; asthma; bronchitis; laryngitis; Alzheimer's disease;  
 chronic rhinosinusitis; oedema; inflammation; congestive heart failure;  
 cardiomyopathy; coronary arterial disease; myocardial infarction; AIDS;  
 diminished cardiac vagal activity; hypertension; epilepsy; ischaemia;  
 angina; immune response; antihistamine; therapy.

Synthetic.

MO9951626-A2.

14-OCT-1999.

26-MAR-1999; 99MO-EP02076.

03-APR-1998; 98US-0054393.

(BMRA-) BMRA CORP BV.

Mutter M, Lacroix J, Grouzmann E;

WPI: 1999-620192/53.

New agonists of neuropeptide Y containing linear peptide linked to  
 cyclic template peptide, used e.g. to reduce airway restriction in  
 asthma

Disclosure: Page 42; 45pp; English.

This sequence represents peptide Y (PPY). The invention relates to  
 neuropeptide Y (NPY) agonists comprising: (i) a template comprising a  
 cyclic peptide (Ia) of 3-10 amino acids (aa) in which at least two  
 residues are joined by a naphthyl ring; and (ii) at least one linear  
 peptide (Ib) of 12-37 aa, bound to (i). The agonists, also NPY itself,  
 CC the related sequence PYY and PYY agonists, are used to reduce airway  
 CC restriction in patients with bronchial disease, especially asthma and  
 CC bronchitis. The agonists may also be used: (i) to treat conditions  
 CC responsive to NPY or PYY, e.g. laryngitis, chronic rhinosinusitis,  
 CC oedema, inflammation, anxiety, congestive heart failure, cardiomyopathy,  
 CC coronary arterial disease, diminished cardiac vagal activity,  
 CC hypertension, Alzheimer's disease, epilepsy, ischaemia, angina,  
 CC myocardial infarction, acquired immune deficiency syndrome and diseases  
 CC characterised by reduced immune responses; and (ii) to increase body  
 CC weight or as an antihistamine. The template induces folding of (Ib) into  
 CC a biologically active form. Since (i) contain only the C-terminal region  
 CC of NPY, they are selective for the Y2 receptor, i.e. they do produce the  
 side effects associated with binding to the Y1 receptor.

SQ Sequence 36 AA:

Query Match 100.0%; Score 180; DB 20; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 4e-19;  
 Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 34  
 |||||  
 Db 3 ikpeapedaspeelnyaslrhylnlvtrqry 36

RESULT 6

ID AAB12178 standard; peptide: 36 AA.

AC	AAB12178;
XX	
DT	20-JUN-2001 (first entry)
XX	
DE	Human peptide YY.
KW	Human; neuropeptide Y; luteinizing hormone; reproductive system;
KM	NPY; NPY-Y4 receptor; precocious puberty; benign prostatic hyperplasia;
KW	polycystic ovary syndrome; endometriosis; benign prostatic hyperplasia;
KM	delayed puberty; amenorrhea; breast cancer; prostate cancer;
KW	peptide YY; PYY.
XX	
OS	Homo sapiens.
FH	Key Location/Qualifiers
FT	Modified-site 36 /note= "C-terminal amide"
FT	
PN	WO200030674-A1.
PD	
XX	
02-JUN-2000.	
XX	
PR	26-NOV-1999; 99WO-GB03963.
XX	
PR	26-NOV-1998; 98GB-0025969.
XX	
PA	13-MAY-1999; 99GB-0011178.
XX	
(FERR ) FERRING BV.	
PI	
Broqua P, Akinsanya K, Hayward A:	
XX	
WPI: 2000-399931/34.	
XX	
Treating human reproductive disorders such as amenorrhea, delayed	
PT	puberty, polycystic ovary syndrome and endometriosis, comprises
PT	administering a neuropeptide Y-Y4 receptor ligand -
PS	
Disclosure: Page 2; 17pp; English.	
XX	
Neuropeptide Y (NPY) (AAB12177) has a number of effects on the	
CC	reproductive system. NPY is one of a family of neuropeptides. Other
CC	members of the family include the present sequence, peptide YY (PYY), and
CC	pancreatic polypeptide (PP, see AAB12179 and AAB12180). Selective NPY-Y4
CC	receptor agonists have been found (see AAB12181 to AAB12183). The NPY-Y4
CC	receptor agonists cause an increase in the circulating levels of
CC	luteinizing hormone (LH) and hence improve the fertility of animals with
CC	compromised reproductive function. The NPY-Y4 agonists may be used to
CC	treat human reproductive disorders such as delayed puberty and
CC	amenorrhoea. In addition, NPY-Y4 antagonists may be used to treat human
CC	reproductive disorders such as precocious puberty, endometriosis,
CC	polycystic ovary syndrome, benign prostatic hyperplasia and
CC	hormone-dependent neoplasias e.g. breast cancer and prostate cancer. The
SQ	present sequence was used in a sequence homology comparison.
Sequence 36 AA:	
Query Match 100.0%; Score 180; DB 21; Length 36;	
Best Local Similarity 100.0%; Pred. No. 4e-19;	
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
OY 1 IKPEAPGEDASPEELNRYASTLRHYLNLTTRORY 34	
Db 3 IKPEAPGEDASPEELNRYASTLRHYLNLTTRORY 36	
RESULT 7	
AAy87961	
ID AAy87961 standard; peptide; 36 AA.	
XX	
AAy87961;	
XX	
18-SEP-2000 (first entry)	

[illegible]

PN US6046167-A.  
XX  
PD 04-APR-2000.  
XX  
PF 25-MAR-1998; 98US-0047986.  
XX  
PR 25-MAR-1998; 98US-0047986.  
XX  
PA (UYCI-) UNIV CINCINNATI.  
XX  
PI Balasubramaniam A;  
XX  
DR WPI; 2000-327889/28.  
XX  
XX  
XX New peptide YY analogs especially useful for treating gastrointestinal  
XX disorders associated with excess intestinal electrolytes and water  
XX secretion, and decreased absorption, e.g. infections and inflammatory  
XX diarrhea -

The invention relates to novel peptide YY (PYY) analogues (AAH87551-187564 and AAH87568) that can be used for the treatment of gastrointestinal disorders. PYY (AAH87549, AAH87550) is a 36 residue peptide amide that is released into the circulation after a meal and which is thought to play a role in regulating intestinal secretion and absorption. It binds to a receptor on intestinal epithelial cells, and inhibits intestinal secretion and gut motility. It is therefore a natural inhibitor of diarrhoea. PYY has also been implicated in nutrient uptake, cell proliferation, lipolysis and vasoconstriction. The compounds of the invention are useful for inhibiting fluid and electrolyte secretion in the small intestine; augmenting nutrient transport; increasing cell proliferation in the gastrointestinal tract; regulating lipolysis in, for example, adipose tissue; and regulating blood flow in mammals. The analogues are especially useful in the treatment of gastrointestinal disorders associated with excess intestinal electrolytes and water secretion, as well as decreased absorption. For example, they are useful in treating acute viral or bacterial diarrhoea, diarrhoea due to protozoal infections, travellers' diarrhoea, inflammatory diarrhoea (e.g., Crohn's disease, irritable bowel syndrome); short bowel syndrome; or diarrhoea following leishmaniasis. The peptides can also be used to treat an emergency or life-threatening situation involving a gastrointestinal disorder, e.g., after surgery or due to cholera; and to treat intestinal dysfunction in patients with AIDS, especially those with cachexia. As the PYY analogues are shorter than naturally occurring PYY, synthesis and purification of the compounds is easier and less costly. The analogues interact specifically with PYY receptors and not with receptors for the PYY homologue neuropeptide Y (NPY), thus minimising unwanted side reactions. The present sequence represents human PYY.

	Query Match	100.0%	Score	180;	DB	21;	Length	36;	
	Best Local Similarity	100.0%;	Pred.	No.	4e-19;				
Matches	34;	Conservative	0;	Mismatches	0;	Indels	0;	Gaps	0;
QY	1	KKPEAPGEDASPEELNRYYSALRHLYNLVTRORY	34						
db	3	kKpeapgedaspeelnryyaslrlhylnlvtryrj	36						

RESULT	9
AAB91223	ID
AAB91223 standard; Peptide; 36 AA.	
XX	
XX	AAB91223;
AC	
XX	22-JUN-2001 (first entry)
DT	
XX	
DE	Peptide YY SEQ ID NO:397.
XX	
KW	Protection; endogenous therapeutic peptide; peptidase; conjugation;

KW blood component; modification; succinimide; maleimide group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.

OS	Homo sapiens.
OS	Synthetic.
XX	
PN	WO200069900-A2.

PD	23-NOV-2000.	
XX		
PF	17-MAY-2000;	2000MO-US13576.
XX		
PR	17-MAY-1999;	99US-0134406.
PR	10-SEP-1999;	99US-0153406.
PR	15-OCT-1999;	99US-0159783.

PA (CONT.) CONJUCHEM INC.  
XX  
PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;  
XX  
DR WPI: 2001-112059/12.

PT Modifying and attaching therapeutic peptides to albumin prevents  
 PT peptidase degradation, useful for increasing length of in vivo activity  
 PT -  
 XX  
 PS Disclosure: Page 327-328; 733pp; English.

The present invention describes modified therapeutic peptide (I) comprising a therapeutically active amino acid region (III) and a reactive group (II) (e.g. succinimide and maleimide groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups on blood components to form a peptide stabilised therapeutic peptide composed of 3-50 amino acids. (I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half life) and specificity as bonding to large molecules decreases intracellular uptake and interference with physiological processes. AAB90829 to AAB92441 represent the present invention. CC exemplification of the present invention.

Query Match	100.0%	Score 180;	DB 22;	Length 36;
Best Local Similarity	100.0%	Pred. No. 4e-19;		
Matches 34;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
OY	1	IKPEAPGEDASPEELNRYIASLRHINLVTRORY	34	
cb	3	IKPEAPGEDASPEELNRYIASLRHINLVTRORY	36	

RESULT 10  
AAU06188  
ID AAU06188 standard; peptide; 36 AA.  
XX  
AC AAU06188;  
XX  
DT 04-DEC-2001 (first entry)  
XX  
DE Human peptide tyrosine-tyrosine (PYT) .  
XX  
XX  
XX Human: brain aluminum concentration; central nervous system;  
KW CNS; peptide tyrosine-tyrosine receptor; PYT receptor; PP receptor;  
KW pancreatic polypeptide receptor; Alzheimer's disease; nootropic;  
KW neuro protective.



PS Claim 11; Page 7579-7580; 9803pp; English.

XX AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon  
CC cancer-associated nucleic acid molecules (N) and proteins (P), where  
CC the proteins are collectively known as colon cancer antigens. The colon  
CC cancer antigens have cytostatic activity and can be used in gene  
CC therapy and vaccine production. N and P may be used in the prevention,  
CC diagnosis and treatment of diseases associated with inappropriate P  
CC expression. For example, N and P may be used to treat disorders  
CC associated with decreased expression by rectifying mutations or deletions  
CC in a patient's genome that affect the activity of P by expressing  
CC inactive proteins or to supplement the patients own production of P.  
CC Additionally, N may be used to produce the colon cancer-associated P,  
CC by inserting the nucleic acid into a host cell and culturing the cell  
CC to express the proteins. N and P can be used in the prevention, diagnosis  
CC and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204  
CC and AAB7789 represent sequences used in the exemplification of the  
CC present invention.

CC N.B. Pages 666 to 682 and page 7053 of the sequence listing were  
CC missing at time of publication, meaning no sequences are present for  
CC SEQ ID NO:1027 to 1052, 7921 and 7922.

XX Sequence 176 AA;

Query Match 100.0%; Score 180; DB 22; Length 176;  
Best Local Similarity 100.0%; Pred. No. 2.9e-18;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
Db 55 lkpeapgedaspeelnryaslrhylnlvtrory 88  
|||||

RESULT 13  
AAB91109  
ID AAB91109 standard; Peptide; 36 AA.

XX AAB91109;

XX 22-JUN-2001 (first entry)

XX Parathyroid hormone (PTH) related peptide SEQ ID NO:283.

XX Protection; endogenous therapeutic peptide; peptidase; conjugation;  
KW blood component; modification; succinimide; maleimide group; amino;  
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

XX Homo sapiens.  
XX Synthetic.

XX WO200069900-A2.

XX 23-NOV-2000.

XX 17-MAY-2000; 2000MO-US13576.

XX 17-MAY-1999; 99US-0134406.

XX 10-SEP-1999; 99US-0153406.

XX 15-OCT-1999; 99US-0159783.

XX (CONU-) CONUICHEM INC.

XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;

XX WPI; 2001-112059/12.

XX Modifying and attaching therapeutic peptides to albumin prevents  
PT peptidase degradation, useful for increasing length of in vivo activity

XX Disclosure; Page 285; 733pp; English.

CC The present invention describes a modified therapeutic peptide (I)  
CC comprising a therapeutically active amino acid region (II) and a  
CC reactive group (II) (e.g. succinimide and maleimide groups) attached to  
CC a less therapeutically active amino acid region (IV), which covalently  
CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
CC peptidase stabilized therapeutic peptide composed of 3-50 amino acids.  
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
CC factors and neurotransmitters, to protect them from peptidase activity  
CC in vivo for the treatment of various disorders. Endogenous therapeutic  
CC peptides are not suitable as drug candidates as they require frequent  
CC administration due to rapid degradation by peptidases in the body.  
CC Modifying and attaching therapeutic peptides to albumin prevents or  
CC reduces the action of peptidases to increase length of activity (half  
CC life) and specifically as bonding to large molecules decreases  
CC intracellular uptake and interference with physiological processes.  
CC AAB90829 to AAB92441 represent peptides which can be used in the  
CC exemplification of the present invention.

XX Sequence 36 AA;

Query Match 96.7%; Score 174; DB 22; Length 36;  
Best Local Similarity 97.1%; Pred. No. 3e-18;  
Matches 33; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
Db 3 lkpeapgedaspeelnryaslrhylnlvtrory 36  
|||||

RESULT 14  
AAB62049  
ID AAB62049 standard; peptide; 36 AA.

XX AAB62049;

XX 14-JUN-1995 (first entry)

XX Porcine peptide YY (PYY).

XX Peptide YY; PYY; gastro-enterological disorders; intestinal water;

XX electrolyte secretion; cell proliferation; nutrient transport;

XX lipolysis; blood flow regulation.

XX Sus scrofa.

XX WO9422467-A.

XX 13-OCT-1994.

XX 29-MAR-1994; 94WO-US03380.

XX 29-MAR-1993; 93US-0038534.

XX 19-AUG-1993; 93US-0109326.

XX (UYCI-) UNIV CININNATI.

XX Balasubramaniam A;

XX WPI; 1994-332815/41.

XX New peptide derivs. - useful as therapeutic agents, for treating  
PT gastro-enterological disorders

XX Disclosure; Page 3; 45pp; English.

XX AAB62049 describes the amino acid sequence of porcine peptide YY  
CC (PYY), which was isolated from the endocrine cells of the porcine  
CC gastrointestinal tract and pancreas. Using this sequence as a base  
CC the PYY analogues described in AAB62051-R62082 were produced. The  
CC new peptides were found to have a variety of properties, that made  
CC them useful as therapeutic agents in the treatment of  
CC gastro-enterological disorders. As part of a therapeutic

CC composition they could be used for decreasing excess intestinal  
 CC water and electrolyte secretion, for regulating cell proliferation  
 CC and augmenting nutrient transport, and for regulating lipolysis  
 CC and blood flow.  
 XX  
 SQ Sequence 36 AA;

Query Match 95.0%; Score 171; DB 15; Length 36;  
 Best Local Similarity 97.0%; Pred. No. 8.4e-18;  
 Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
 ||||||||||||||||||||||||||||||||  
 Db 4 kpeapedaspeelstryaslrhylnlvtrqry 36

## RESULT 15

AAR97740  
 ID AAR97740 standard; peptide; 36 AA.

AAR97740;

09-JAN-1997 (first entry)

Porcine peptide YY.

Peptide YY; PYY; porcine; human; intestine; endocrine cell; gut motility;  
 gastrointestinal tract; pancreas; inhibitor; intestinal secretion; pig;  
 pancreatic tumour; blood flow; serous cyst adenoma; microcystic tumour;  
 solid-cyst tumour; malignant tumour; therapy.

Sus scrofa.

W09614854-A1.

23-MAY-1996.

03-NOV-1995; 95WO-US14303.

14-NOV-1994; 94US-0338395.

(REGC ) UNIV CALIFORNIA.

McFadden DW;

WPI; 1996-259558/26.

Use of peptide YY and its agonists to treat pancreatic tumours -  
 either in vitro or in vivo to reduce tumour cell proliferation

Disclosure; Page 3; 22pp; English.

AAR97740 and AAR97741 represent porcine and human peptide YY (PYY)  
 respectively. This sequence is isolated from intestine, and is  
 localised in the endocrine cells of the gastrointestinal tract and the  
 pancreas. PYY is thought to inhibit gut motility and blood flow, to  
 mediate intestinal secretion, and stimulate net absorption. These  
 sequences, and agonists against them (see AAR97742-R97744), can be used  
 in the method of the invention. The method of the invention is for  
 inhibiting pancreatic tumours by contacting them with an effective amount  
 of one of these sequences. The method is effective in treating both  
 benign and malignant pancreatic tumours. The types of benign tumour  
 pancreatic tumours that can be treated, include, serous cyst adenomas,  
 microcystic tumours, and solid-cyst tumours. The malignant tumours  
 capable of being treated by the method of the invention include,  
 carcinomas arising from the ducts, acini, or islets of the pancreas.  
 XX  
 SQ Sequence 36 AA;

Query Match 95.0%; Score 171; DB 17; Length 36;  
 Best Local Similarity 97.0%; Pred. No. 8.4e-18;

Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
 ||||||||||||||||||||||||||||||||  
 Db 4 kpeapedaspeelstryaslrhylnlvtrqry 36

Search completed: July 30, 2002, 08:00:33  
 Job time: 61 sec

Tue Jul 30 10:09:19 2002

us-10-016-969-3.rag

---



GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: July 30, 2002, 07:59:32 ; Search time 51.48 seconds  
(without alignments)  
77.674 Million cell updates/sec

Title: US-10-016-969-2  
Perfect score: 194  
Sequence: 1 YPIKEPARGEDASPELNRYASLHMYLNTYRQRY 36

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	194	100.0	36 15 AAR62050	Human peptide YY (
2	194	100.0	36 17 AAR97741	Human peptide YY.
3	194	100.0	36 19 AAW51801	Human peptide YY.
4	194	100.0	36 20 AAY43335	Peptide Y. Synthe
5	194	100.0	36 21 AAB12178	Human peptide YY.
6	194	100.0	36 21 AAY87961	Human neuropeptide
7	194	100.0	36 21 AAY87550	Human peptide YY (
8	194	100.0	36 22 AAB91223	Peptide YY SEQ ID
9	194	100.0	36 22 AAO6188	Human peptide tyro
10	194	100.0	97 21 AAB08020	Amino acid sequenc
11	194	100.0	176 22 AAG75364	Human colon cancer

12	188	96.9	36 22 AAB91109	Parathyroid hormon
13	185	95.4	36 22 AAB91226	Peptide YY SEQ ID
14	184	94.8	36 15 AAR62049	Porcine peptide YY
15	184	94.8	36 17 AAR97740	Porcine peptide YY
16	184	94.8	36 18 AAW15365	[lim-DNP-His26]-PYY
17	184	94.8	36 19 AAW51800	Porcine peptide YY
18	184	94.8	36 21 AAY87549	Porcine peptide YY
19	184	94.8	36 22 AAB91225	Peptide YY SEQ ID
20	184	94.8	36 22 AAO6187	Peptide YY SEQ ID
21	180	92.8	34 22 AAB91224	Peptide YY small inte
22	177	91.2	36 11 AAR07278	Peptide YY analogu
23	175	90.2	36 19 AAW51808	Peptide YY small inte
24	168	86.6	36 11 AAR07277	Peptide YY small inte
25	166	85.6	36 20 AAY50293	Peptide YY small inte
26	160	82.5	36 11 AAR07276	Peptide YY small inte
27	155	79.9	36 16 AAR87890	Neuropeptide Y ago
28	155	79.9	36 12 AAB91222	Pancreatic polypep
29	146	75.3	36 17 AAW06955	Porcine neuropepti
30	146	75.3	36 17 AAR97743	Porcine neuropepti
31	146	75.3	36 21 AAY51550	Rat and porcine ne
32	146	75.3	36 22 AAB97621	Porcine/rat neurope
33	144	74.2	36 17 AAR97742	Human neuropeptide
34	144	74.2	36 19 AAW51823	Peptide YY analogu
35	144	74.2	36 21 AAY51549	Human neuropeptide
36	144	74.2	36 22 AAE06684	Human neuropeptide
37	144	74.2	36 22 AAB97620	Human neuropeptide
38	144	74.2	36 22 AAB91213	Neuropeptide Y pep
39	144	74.2	36 22 AAO06195	Mammalian neuropep
40	144	74.2	97 20 AAY43334	Neuropeptide Y. S
41	144	74.2	97 20 AAY43334	Human prepro-neuro
42	144	74.2	97 21 AAB35660	Human neuropeptide
43	144	74.2	97 21 AAY57078	Human neuropeptide
44	144	74.2	97 22 AAE07919	Human neuropeptide
45	144	74.2	97 22 AAE07955	Human neuropeptide

#### ALIGNMENTS

RESULT 1  
AAR62050 standard; peptide; 36 AA.  
ID AAR62050:  
AC AAR62050:  
XX  
DT 14-JUN-1995 (first entry)  
XX  
DE Human peptide YY (PYY).  
XX  
KW Peptide YY; PYY; gastro-enterological disorders; intestinal water;  
KW electrolyte secretion; cell proliferation; nutrient transport;  
KW lipolysis; blood flow regulation.  
XX  
OS Homo sapiens.  
XX  
PN W09422467-A.  
XX  
PD 13-OCT-1994.  
XX  
PE 29-MAR-1994; 94MO-US03380.  
XX  
PR 29-MAR-1993; 93US-0038534.  
PR 19-AUG-1993; 93US-0109326.  
XX  
PA (UYCI-) UNIV CINCINNATI.  
XX  
PI Balasubramaniam A;  
XX  
DR WPI: 1994-332815/41.  
XX  
PT New peptide derivs. - useful as therapeutic agents, for treating  
PT gastro-enterological disorders

PS Disclosure; Page 3; 45pp; English.

XX AAR62050 describes the amino acid sequence of human peptide YY  
CC (PYY), which was isolated from the endocrine cells of the human  
CC gastrointestinal tract and pancreas. Using the equivalent porcine  
CC PYY sequence (AAR62049) as a base the PYY analogues described in  
CC AAR62051-R62082 were produced. The new peptides were found to have  
CC a variety of properties, that made them useful as therapeutic  
CC agents in the treatment of gastro-enterological disorders. As part  
CC of a therapeutic composition they could be used for decreasing  
CC excess intestinal water and electrolyte secretion, for regulating  
CC cell proliferation and augmenting nutrient transport, and for  
CC regulating lipolysis and blood flow.

XX Sequence 36 AA;

Query Match 100.0%; Score 194; DB 15; Length 36;  
Best Local Similarity 100.0%; Pred. No. 2,2e-20;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36  
1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36

# RESULT 2

AAR97741  
ID AAR97741 standard; peptide: 36 AA.

XX AAR97741;

10-JAN-1997 (first entry)

XX Human peptide YY.

XX Peptide YY; PYY; porcine; human; intestine; endocrine cell; gut motility;  
XX gastrointestinal tract; pancreas; inhibitor; intestinal secretion; pig;  
XX pancreatic tumour; blood flow; serous cyst adenoma; microcystic tumour;  
XX solid-cyst tumour; malignant tumour; therapy.

XX Homo sapiens.

XX WO9614854-A1.

XX 23-MAY-1996.

XX 03-NOV-1995; 95WO-US14303.

XX 14-NOV-1994; 94US-0338395.

XX (REGC ) UNIV CALIFORNIA.

XX Mcfadden DW;

XX WPI: 1996-259558/26.

XX Use of peptide YY and its agonists to treat pancreatic tumours -  
XX either in vitro or in vivo to reduce tumour cell proliferation  
XX Disclosure; Page 3; 22pp; English.

XX AAR97740 and AAR97741 represent porcine and human peptide YY (PYY)  
XX respectively. This sequence is isolated from intestine, and is  
XX localised in the endocrine cells of the gastrointestinal tract and the  
XX pancreas. PYY is thought to inhibit gut motility and blood flow, to  
XX mediate intestinal secretion, and stimulate net absorption. These  
XX sequences, and agonists against them (see AAR97742-R97744), can be used  
XX in the method of the invention. The method of the invention is for  
XX inhibiting pancreatic tumours by contacting them with an effective amount  
XX of one of these sequences. The method is effective in treating both  
XX benign and malignant pancreatic tumours. The types of benign tumour  
XX pancreatic tumours that can be treated, include, serous cyst adenomas,

CC microcystic tumours, and solid-cyst tumours. The malignant tumours  
CC capable of being treated by the method of the invention include,  
CC carcinomas arising from the ducts, acini, or islets of the pancreas.

XX Sequence 36 AA;

Query Match 100.0%; Score 194; DB 17; Length 36;  
Best Local Similarity 100.0%; Pred. No. 2,2e-20;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36  
1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36

# RESULT 3

AAM51801  
ID AAM51801 standard; peptide: 36 AA.

XX AAM51801;

13-OCT-1998 (first entry)

XX Human peptide YY.

XX Peptide YY; cell proliferation; nutrient transport; lipolysis;  
XX electrolyte secretion; anti-secretory; intestinal water; antimotility;

XX Homo sapiens.

XX WO9820885-A1.

XX 22-MAY-1998.

XX 13-NOV-1996; 96WO-US18374.

XX 13-NOV-1996; 96WO-US18374.

XX (UYCI-) UNIV CINCINNATI.

XX Balasubramaniam A;

XX WPI: 1998-322327/28.

XX New analogue(s) of peptide YY - used, e.g. to control cell  
XX proliferation, nutrient transport, lipolysis and intestinal water  
XX and electrolyte secretion  
XX Disclosure; Page 3; 54pp; English.

XX The invention relates to peptide YY analogues which may be used e.g. for  
XX decreasing excess intestinal water and electrolyte secretion in mammals,  
XX to regulate cell proliferation (especially intestinal cell  
XX proliferation), to increase nutrient transport, to regulate lipolysis  
XX and to regulate blood flow. The peptides exhibit antisecretory and  
XX antimotility properties and are especially useful in treatment of  
XX gastrointestinal disorders associated with excess intestinal electrolyte  
XX and water secretion as well as decreased absorption. The new peptides  
XX are truncated versions of peptide YY. They interact solely with peptide  
XX YY receptors and not with homologous receptors such as NPY Y1 and Y3,  
XX thus minimising unwanted (ant)agonist side reactions. The present  
XX sequence represents human peptide YY.

XX Sequence 36 AA;

Query Match 100.0%; Score 194; DB 19; Length 36;  
Best Local Similarity 100.0%; Pred. No. 2,2e-20;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36  
1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36

Db 1 ypkpkeagdaspeelnryaslrnylnlvtrqy 36

## RESULT 4

ID AAY43335 standard; peptide; 36 AA.

AC AAY43335;

XX 25-JUN-2000 (first entry)

DE Peptide Y.

XX Neuropeptide Y; NPY; agonist; peptide YY; PYY; airway restriction;  
 XX bronchial disease; asthma; bronchitis; laryngitis; Alzheimer's disease;  
 XX chronic rhinosinusitis; oedema; inflammation; congestive heart failure;  
 XX cardiomyopathy; coronary arterial disease; myocardial infarction; AIDS;  
 XX diminished cardiac vagal activity; hypertension; epilepsy; ischaemia;  
 XX angina; immune response; antihistamine; therapy.

XX Synthetic.

XX WO9951626-A2.

XX 14-OCT-1999.

XX 26-MAR-1999; 99WO-EP02076.

XX 03-APR-1998; 98US-0054393.

XX (BMRA-) BMRA CORP BV.

XX Mutter M, Lacroix J, Grouzmann E;

XX WPI: 1999-620192/53.

XX New agonists of neuropeptide Y containing linear peptide linked to  
 PT cyclic template peptide, used e.g. to reduce airway restriction in  
 PT asthma

XX Disclosure; Page 42; 45pp; English.

XX This sequence represents peptide Y (PYY). The invention relates to  
 CC neuropeptide Y (NPY) agonists comprising: (i) a template comprising a  
 CC cyclic peptide (Ia) of 3-10 amino acids (aa) in which at least two  
 CC residues are joined by a naphthyl ring; and (ii) at least one linear  
 CC peptide (Ib) of 12-37 aa, bound to (i). The agonists, also NPY itself,  
 CC the related sequence PYY and PYY agonists, are used to reduce airway  
 CC restriction in patients with bronchial disease, especially asthma and  
 CC bronchitis. The agonists may also be used: (i) to treat conditions  
 CC responsive to NPY or PYY, e.g. laryngitis, chronic rhinosinusitis,  
 CC oedema, inflammation, anxiety, congestive heart failure, cardiomyopathy,  
 CC coronary arterial disease, diminished cardiac vagal activity,  
 CC hypertension, Alzheimer's disease, epilepsy, ischaemia, angina,  
 CC myocardial infarction, acquired immune deficiency syndrome and diseases  
 CC characterised by reduced immune responses; and (ii) to increase body  
 CC weight or as an anasthesia. The template induces folding of (Ib) into  
 CC a biologically active form. Since (i) contain only the C-terminal region  
 CC of NPY, they are selective for the Y2 receptor, i.e. they do produce the  
 CC side effects associated with binding to the Y1 receptor.

XX Sequence 36 AA:

Query Match 100.0%; Score 194; DB 20; Length 36;

Best Local Similarity 100.0%; Pred. No. 2.2e-20;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 YPKPKEAGDASPEELNRYASLRNYLNLTQRQY 36

Db 1 ypkpkeagdaspeelnryaslrnylnlvtrqy 36

## RESULT 5

ID AAB12178 standard; peptide; 36 AA.

AC AAB12178;

XX 20-JUN-2001 (first entry)

DE Human peptide YY.

XX Human; neuropeptide Y; luteinizing hormone; reproductive system;

XX NPY; NPY-Y4 receptor; precocious puberty; benign prostatic hyperplasia;

XX polycystic ovary syndrome; endometriosis; breast cancer; prostate cancer;

XX delayed puberty; amenorrhea; breast cancer; prostate cancer;

XX peptide YY; PYY.

XX Homo sapiens.

XX Key Location/Qualifiers

XX Modified-site 36

XX WO200030674-A1.

XX 02-JUN-2000.

XX 26-NOV-1999; 99WO-GB03963.

XX 26-NOV-1998; 98GB-0025969.

XX 13-MAY-1999; 99GB-0011178.

XX (FERR) FERRING BV.

XX Broqua P, Akinsanya K, Hayward A;

XX WPI: 2000-399931/34.

XX Treating human reproductive disorders such as amenorrhea, delayed

XX puberty, polycystic ovary syndrome and endometriosis, comprises

XX administering a neuropeptide Y-Y4 receptor ligand

XX Disclosure; Page 2; 17pp; English.

XX Neuropeptide Y (NPY) (AAB12177) has a number of effects on the  
 CC reproductive system. NPY is one of a family of neuropeptides. Other  
 CC members of the family include the present sequence, peptide YY (PYY), and  
 CC pancreatic polypeptide (PP, see AAB12179 and AAB12180). Selective NPY-Y4  
 CC receptor agonists have been found (see AAB12181 to AAB12183). The NPY-Y4  
 CC receptor agonists cause an increase in the circulating levels of  
 CC luteinizing hormone (LH) and hence improve the fertility of animals with  
 CC compromised reproductive function. The NPY-Y4 agonists may be used to  
 CC treat human reproductive disorders such as delayed puberty and  
 CC amenorrhea. In addition, NPY-Y4 antagonists may be used to treat human  
 CC reproductive disorders such as precocious puberty, endometriosis,  
 CC polycystic ovary syndrome, benign prostatic hyperplasia and  
 CC hormone-dependent neoplasias e.g. breast cancer and prostate cancer. The  
 CC present sequence was used in a sequence homology comparison.

XX Sequence 36 AA:

Query Match 100.0%; Score 194; DB 21; Length 36;

Best Local Similarity 100.0%; Pred. No. 2.2e-20;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 YPKPKEAGDASPEELNRYASLRNYLNLTQRQY 36

Db 1 ypkpkeagdaspeelnryaslrnylnlvtrqy 36

## RESULT 6

ID AAY87961 standard; peptide; 36 AA.

```

XX AC AAY87961;
XX FT 18-SEP-2000 (first entry)
XX DT
XX DE Human neuropeptide PPV fragment.
XX NE Neuropeptide; human; treatment; reproductive disorder; neuropeptide Y;
XX KW endocrine; gynecological; cytostatic; puberty; endometriosis;
XX KM polycystic ovary syndrome; prostatic hyperplasia; amenorrhea.
XX OS
XX PN GB2344050-A.
XX PD 31-MAY-2000.
XX PF 26-NOV-1998; 98GB-0025969.
XX PR 26-NOV-1998; 98GB-0025969.
XX (FERR) FERRING BV.
XX PI Akinsanya K, Hayward A, Broqua P;
XX DR WPI: 2000-331548/29.
XX PT Compositions containing a neuropeptide Y Y4 receptor ligand selective
XX PT for the hypothalamic-pituitary-gonadal axis, for treatment of
XX PT reproductive disorders e.g. delayed or precocious puberty,
XX PT endometriosis and benign prostatic hyperplasia.
XX PS Disclosure: Page 2; 12pp; English.
XX CC This invention describes the novel use of a composition containing a
XX CC neuropeptide Y (NPY) Y4 receptor ligand for treatment of human
XX CC reproductive disorders. The products described in the invention have
XX CC endocrine, gynecological and cytostatic activity and can be used for the
XX CC treatment of reduced reproductive function, delayed puberty, supranormal
XX CC function of the reproductive organs, precocious puberty, endometriosis,
XX CC polycystic ovary syndrome, benign prostatic hyperplasia, impaired
XX CC reproductive function or amenorrhea. This sequence represents the human
XX CC PPV neuropeptide which is used in the method of the invention.
XX SQ
XX Sequence 36 AA:
SQ
Query Match 100.0%; Score 194; DB 21; Length 36;
Best Local Similarity 100.0%; Pred. No. 2.2e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
Db 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
RESULT 7
AAY87550
ID AAY87550 standard; peptide: 36 AA.
XX AC AAY87550;
XX DT 18-JUL-2000 (first entry)
XX DE Human peptide YY (PY).
XX PY; peptide YY; human; electrolyte secretion; fluid secretion;
XX KW nutrient uptake; lipolysis; vasoconstriction; gastrointestinal disorder;
XX KM diarrhoea; Crohn's disease; irritable bowel syndrome; ileostomy;
XX OS
XX PN Homo sapiens.
XX DT

```

```

FH Key Location/Qualifiers
FT Modified site 36 /note="C-terminal amide"
XX FT
XX PN US6046167-A.
XX PD 04-APR-2000.
XX PF 25-MAR-1998; 98US-0047986.
XX PR 25-MAR-1998; 98US-0047986.
XX (UYCI-) UNIV CINCINNATI.
XX PA Balasubramaniam A;
XX DR WPI: 2000-327889/28.
XX PT New peptide YY analogs especially useful for treating gastrointestinal
XX PT disorders associated with excess intestinal electrolytes and water
XX PT secretion, and decreased absorption, e.g. infectious and inflammatory
XX PT diarrhoea.
XX PS Disclosure: Column 2; 18pp; English.
XX CC The invention relates to novel peptide YY (PY) analogues
XX CC (AAY87551-87564 and AAY87568) that can be used for the treatment of
XX CC gastrointestinal disorders. PY (AAY87549, AAY87550) is a 36 residue
XX CC peptide amide that is released into the circulation after a meal and
XX CC which is thought to play a role in regulating intestinal secretion and
XX CC absorption. It binds to a receptor on intestinal epithelial cells, and
XX CC inhibits intestinal secretion and gut motility. It is therefore a natural
XX CC inhibitor of diarrhoea. PY has also been implicated in nutrient uptake,
XX CC cell proliferation, lipolysis and vasoconstriction. The compounds of the
XX CC invention are useful for inhibiting fluid and electrolyte secretion in
XX CC the small intestine; augmenting nutrient transport; increasing cell
XX CC proliferation in the gastrointestinal tract; regulating lipolysis in,
XX CC for example, adipose tissue; and regulating blood flow in mammals. The
XX CC analogues are especially useful in the treatment of gastrointestinal
XX CC disorders associated with excess intestinal electrolytes and water
XX CC secretion, as well as decreased absorption. For example, they are useful
XX CC in treating acute viral or bacterial diarrhoea, diarrhoea due to
XX CC or protozoal infections, travellers' diarrhoea, inflammatory diarrhoea
XX CC (e.g., Crohn's disease, irritable bowel syndrome); short bowel syndrome;
XX CC or diarrhoea following ileostomy. The peptides can also be used to treat
XX CC an emergency or life-threatening situation involving a gastrointestinal
XX CC disorder, e.g., after surgery or due to cholera; and to treat intestinal
XX CC dysfunction in patients with AIDS, especially those with cachexia. As
XX CC the PY analogues are shorter than naturally occurring PY, synthesis
XX CC and purification of the compounds is easier and less costly. The
XX CC analogues interact specifically with PY receptors and not with receptors
XX CC for the PY homologue neuropeptide Y (NPY), thus minimising unwanted
XX CC side reactions. The present sequence represents human PY.
XX SQ
XX Sequence 36 AA:
SQ
Query Match 100.0%; Score 194; DB 21; Length 36;
Best Local Similarity 100.0%; Pred. No. 2.2e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
Db 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRQRY 36
RESULT 8
AAB91223
ID AAB91223 standard; Peptide: 36 AA.
XX AC AAB91223;
XX DT 22-JUN-2001 (first entry)

```

XX	Peptide YY SEQ ID NO:397.
DE	
XX	
KW	Protection; endogenous therapeutic peptide; peptidase; conjugation;
KM	Blood component; modification; succinimidy1; maleimido group; amino;
KW	hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX	
OS	Homo sapiens.
XX	Synthetic.
PN	WO20069900-A2.
PD	
XX	23-NOV-2000.
PE	
PF	17-MAY-2000; 2000MO-US13576.
XX	
PR	17-MAY-1999; 99US-0134406.
PR	10-SEP-1999; 99US-0153406.
PR	15-OCT-1999; 99US-0159783.
XX	
PA	(CONJ-) CONDUCHEN INC.
XX	
PI	Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;
DR	
XX	WPI: 2001-112059/12.
XX	
PT	Modifying and attaching therapeutic peptides to albumin prevents
PT	peptidase degradation, useful for increasing length of in vivo activity
PT	-
PS	
XX	Disclosure: Page 327-328; 733pp; English.
CC	
CC	The present invention describes a modified therapeutic peptide (I)
CC	comprising a therapeutically active amino acid region (III) and a
CC	reactive group (II) (e.g. succinimidy1 and maleimido groups) attached to
CC	a less therapeutically active amino acid region (IV), which covalently
CC	bonds with amino/hydroxyl/thiol groups on blood components to form a
CC	peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC	(I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC	factors and neurotransmitters, to protect them from peptidase activity
CC	in vivo for the treatment of various disorders. Endogenous therapeutic
CC	peptides are not suitable as drug candidates as they require frequent
CC	administration due to rapid degradation by peptidases in the body.
CC	Modifying and attaching therapeutic peptides to albumin prevents or
CC	reduces the action of peptidases to increase length of activity (half
CC	life) and specifically as bonding to large molecules decreases
CC	intracellular uptake and interference with physiological processes.
CC	AAB90829 to AAB92441 represent peptides which can be used in the
CC	exemplification of the present invention.
XX	
SO	Sequence 36 AA:
XX	
Query Match	100.0%; Score 194; DB 22; Length 36;
Best Local Similarity	100.0%; Pred. No. 2,2e+20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
OY	1 YPKFPAFGEDASPEELNRYVASLIRYLKLVLRQRY 36       1 YPKFPAFGEDASPEELNRYVASLIRYLKLVLRQRY 36
DB	1 YPKFPAFGEDASPEELNRYVASLIRYLKLVLRQRY 36
RESULT 9	
ID AAU06188	
AAU06188 standard; peptide; 36 AA.	
AC AAU06188;	
DT 04-DEC-2001 (first entry)	
DE Human peptide tyrosine-tyrosine (PTY).	
KW Human; brain aluminium concentration; central nervous system;	

CNS:	peptide	tyrosine-tyrosine receptor; PYV receptor; PP receptor;
KW	pancreatic polypeptide receptor; Alzheimer's disease; nootropic;	
KM	neuro protective.	
XX		
OS	Homo sapiens.	
XX		
PN	MO200158409-A2.	
XX		
PD	16-AUG-2001.	
XX		
PY	07-FEB-2001; 2001WO-US03952.	
PF		
XX		
PR	08-FEB-2000; 2000US-0499980.	
XX		
PA	(UYNC-) UNIV NORTH CAROLINA STATE.	
XX		
PI	Groom WJ, Berg BM, Taylor IL;	
XX		
DR	WPI: 2001-550001/61.	
XX		
PT	Reducing aluminum levels in the central nervous system, for the	
XX	treatment of Alzheimer's disease comprises administration of a peptide	
PP	lysine receptor agonist or a pancreatic polypeptide receptor agonist	
PT	-	
XX		
PS	Disclosure; Page 7; 52pp; English.	
XX		
CC	The present invention relates to a method of reducing aluminum levels	
CC	in the central nervous system (CNS). The method comprises administration	
CC	of a peptide tyrosine-tyrosine (PYV) receptor agonist or a pancreatic	
CC	polypeptide (PP) receptor agonist. The method is useful for the	
CC	treatment of Alzheimer's disease and for reducing aluminum levels in	
CC	the central nervous system, especially the brain, of a subject. The	
CC	treatments are effective and do not impart excessive toxicological	
CC	effects. The present sequence represents human PYV.	
XX		
SQ	Sequence      36 AA:	
Query Match	100.0%; Score 194; DB 22; Length 36;	
Best Local Similarity	100.0%; Pred. No. 2.2e-20;	
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps		
QY	1 YPKPEAPGEDASPEELNRYYSLSRHYNLVTQRORY 36 	
DB	1 YPKPEAPGEDASPEELNRYYSLSRHYNLVTQRORY 36	
RESULT 10		
AAB08020		
ID	AAB08020 standard; Protein; 97 AA.	
XX		
AC	AAB08020;	
XX		
DT	14-NOV-2000 (first entry)	
XX		
DE	Amino acid sequence of a human peptide yY (PYV).	
XX		
KW	Peptide yY; PYV; pancreatic cell growth; pancreatic tissue degeneration;	
KM	glucose metabolism; insulin resistance; glucose intolerance;	
KW	glucose non-responsiveness; hyperglycemia; obesity; hyperlipidemia;	
XX	hyperfiltration; type II diabetes mellitus.	
XX		
OS	Homo sapiens.	
XX		
FH	Key	
FT	Peptide	
FT	/note= "signal peptide"	
FT	Protein	
FT	/note= "mature protein"	
XX		
PN	MO200047219-A2.	
XX		

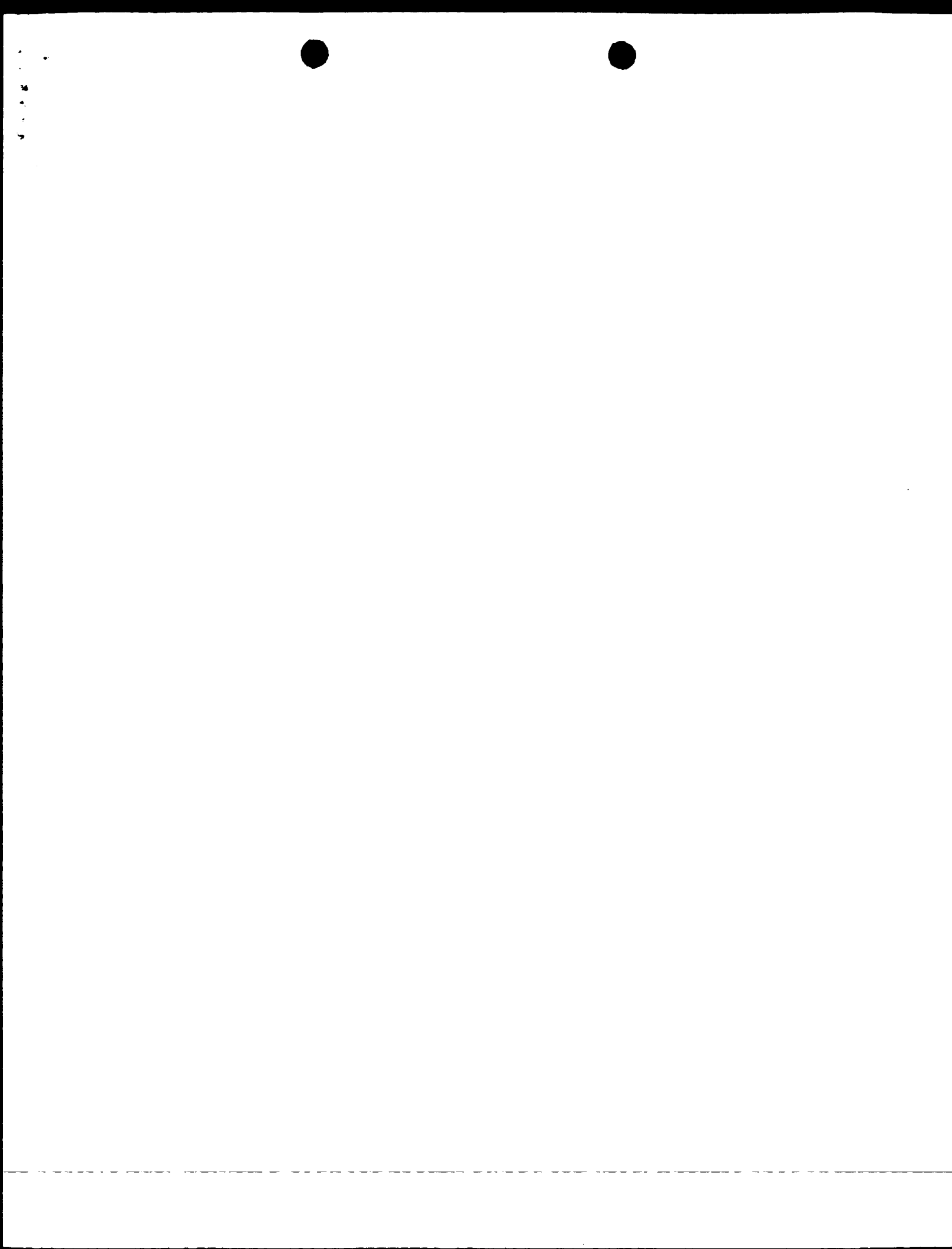
PD 17-AUG-2000.  
 XX  
 PF 10-FEB-2000; 2000MO-US03391.  
 XX  
 PR 10-FEB-1999; 99US-0119577.  
 XX  
 PA (ONTO-) ONTOGENY INC.  
 XX  
 PI Pang K, Lu H;  
 XX  
 DR WPI; 2000-565257/52.  
 DR N-PSDB; AAA59713.  
 XX  
 PT Promoting the growth of pancreatic cells and reducing degeneration of  
 PT pancreatic tissue for treating a disease associated with altered  
 PT glucose metabolism comprises contacting with a composition including  
 PT (an agonist of) peptide YY -  
 XX  
 PS Disclosure; Page 82-83; 83pp; English.  
 CC  
 CC The present sequence represents a human peptide YY (PYY). PYY triggers  
 CC gain of function in glucose non-responsive foetal and adult islets which  
 CC leads to glucose responsiveness. The specification describes a method for  
 CC promoting the growth of pancreatic cells and reducing degeneration of  
 CC pancreatic tissue. The method comprises contacting pancreatic cells  
 CC or tissue with a composition including PYY or an agonist of PYY. The  
 CC method is used for treating a disease, especially in a human, associated  
 CC with altered glucose metabolism, especially insulin resistance, glucose  
 CC intolerance or glucose non-responsiveness, hyperglycemia, obesity,  
 CC hyperlipidemia, hyperfiltration or type II diabetes mellitus.  
 CC  
 CC Sequence 97 AA:  
 SQ  
 Query Match 100.0%; Score 194; DB 21; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 7.4e-20;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36  
 DB 29 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 64  
 RESULT 11  
 AAG75364  
 ID AAG75364 standard; Protein; 176 AA.  
 AC AAG75364;  
 XX  
 DE 03-SEP-2001 (first entry)  
 XX  
 DE Human colon cancer antigen protein SEQ ID NO:6128.  
 XX  
 DE Human colon cancer antigen protein SEQ ID NO:6128.  
 XX  
 KW Human; colon cancer; colon cancer antigen; diagnosis; detection;  
 KW colorectal carcinoma; chromosome 17.  
 XX  
 OS Homo sapiens.  
 OS  
 PN WO200122920-A2.  
 PN  
 PD 05-APR-2001.  
 PD  
 XX  
 XX 28-SEP-2000; 2000MO-US26524.  
 PF  
 PR 29-SEP-1999; 99US-0157137.  
 PR 03-NOV-1999; 99US-0163280.  
 XX  
 PA (HUMA-) HUMAN GENOME SCI INC.  
 XX  
 PI Ruben SM, Barash SC, Birse CE, Rosen CA;  
 XX  
 DR WPI; 2001-235357/24.  
 DR N-PSDB; AAH34769.  
 DR

XX  
 PT Nucleic acids encoding 4277 human colon cancer-associated polypeptides,  
 PT useful for preventing, diagnosing and/or treating colorectal cancers -  
 XX  
 PS Claim 11; Page 7579-7580; 9803pp; English.  
 CC  
 CC AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon  
 CC cancer-associated nucleic acid molecules (N) and proteins (P), where  
 CC the proteins are collectively known as colon cancer antigens. The colon  
 CC cancer antigens have cytostatic activity and can be used in gene  
 CC therapy and vaccine production. N and P may be used in the prevention,  
 CC diagnosis and treatment of diseases associated with inappropriate P  
 CC expression. For example, N and P may be used to treat disorders  
 CC associated with decreased expression by rectifying mutations or deletions  
 CC in a patient's genome that affect the activity of P by expressing  
 CC inactive proteins or to supplement the patient's own production of P.  
 CC Additionally, N may be used to produce the colon cancer-associated P,  
 CC by inserting the nucleic acids into a host cell and culturing the cell  
 CC to express the proteins. N and P can be used in the prevention, diagnosis  
 CC and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204  
 CC and AAB77789 represent sequences used in the exemplification of the  
 CC present invention.  
 CC N.B. Pages 666 to 682 and page 7053 of the sequence listing were  
 CC missing at time of publication, meaning no sequences are present for  
 CC SEQ ID NO:1027 to 1052, 7921 and 7922.  
 CC  
 CC Sequence 176 AA:  
 SQ  
 Query Match 100.0%; Score 194; DB 22; Length 176;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-19;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36  
 DB 53 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 88  
 RESULT 12  
 AAB91109  
 ID AAB91109 standard; Peptide; 36 AA.  
 XX  
 AC AAB91109;  
 XX  
 DE 22-JUN-2001 (first entry)  
 XX  
 DE Parathyroid hormone (PTH) related peptide SEQ ID NO:283.  
 XX  
 KW Protection; endogenous therapeutic peptide; peptidase; conjugation;  
 KW blood component; modification; succinimidy; maleimido group; amino;  
 KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 PN WO200069900-A2.  
 PN  
 PD 23-NOV-2000.  
 PD  
 XX  
 XX 17-MAY-2000; 2000MO-US13576.  
 PF  
 PR 17-MAY-1999; 99US-0134406.  
 PR 10-SEP-1999; 99US-0153406.  
 PR 15-OCT-1999; 99US-0159783.  
 XX  
 PA (CONJ-) CONJUCHEM INC.  
 XX  
 PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;  
 XX  
 DR WPI; 2001-112059/12.  
 DR  
 PT Modifying and attaching therapeutic peptides to albumin prevents  
 PT peptidase degradation, useful for increasing length of in vivo activity









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OM protein - protein search, using sw model

Run on: July 30, 2002, 07:59:32 ; Search time 20.59 Seconds  
(Without alignments)  
42.706 Million cell updates/sec

Title: US-10-016-969-2

Perfect score: 194  
Sequence: 1 YPIKPEAPGEDASPELNRYVSLRHYLNLVTRORY 36

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents, AI: \*  
1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep: \*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep: \*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep: \*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep: \*  
5: /cgn2\_6/ptodata/2/1aa/PCITUS.COMB.pep: \*  
6: /cgn2\_6/ptodata/2/1aa/backfiles1.pep: \*

Prod. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	194	100.0	36	1	US-08-338-395-2
2	194	100.0	36	1	US-08-329-151-2
3	194	100.0	36	3	US-09-054-393-2
4	194	100.0	36	3	US-09-047-986B-2
5	194	100.0	36	4	US-09-229-900-2
6	194	100.0	36	5	PCT-US95-14303-2
7	184	94.8	36	1	US-07-882-923-3
8	184	94.8	36	1	US-08-338-395-1
9	184	94.8	36	1	US-08-329-151-1
10	184	94.8	36	3	US-09-047-986B-1
11	184	94.8	36	5	PCT-US95-14303-1
12	175	90.2	36	1	US-08-329-151-9
13	158.5	81.7	35	1	US-07-776-272-30
14	146	75.3	36	1	US-07-882-923-1
15	146	75.3	36	1	US-08-264-030-1
16	146	75.3	36	1	US-08-338-395-4
17	146	75.3	36	3	US-08-907-403A-2
18	146	75.3	36	5	PCT-US95-14303-4
19	144	74.2	36	1	US-07-882-923-2
20	144	74.2	36	1	US-08-338-395-3
21	144	74.2	36	1	US-08-329-151-24
22	144	74.2	36	3	US-08-907-403A-1
23	144	74.2	36	5	PCT-US95-14303-3
24	144	74.2	97	3	US-09-054-393-1
25	144	74.2	97	3	US-08-994-946A-6
26	144	74.2	97	4	US-09-229-900-1
27	144	74.2	97	4	US-09-291-994-6

28	129	66.5	24	3	US-09-054-393-7	Sequence 7, Appli
29	129	66.5	24	4	US-09-229-900-7	Sequence 7, Appli
30	115.5	59.5	31	4	US-07-776-272-23	Sequence 23, Appli
31	106	54.6	36	2	US-08-806-203-1	Sequence 1, Appli
32	103	53.1	36	1	US-07-776-272-18	Sequence 18, Appli
33	97	50.0	28	1	US-08-264-030-3	Sequence 3, Appli
34	96	49.5	28	1	US-08-264-030-5	Sequence 5, Appli
35	95	49.0	28	1	US-08-264-030-10	Sequence 10, Appli
36	88	45.4	20	1	US-07-882-923-11	Sequence 11, Appli
37	86.5	44.6	25	1	US-08-264-030-7	Sequence 7, Appli
38	85	43.8	19	1	US-07-882-923-4	Sequence 4, Appli
39	84.5	43.6	25	1	US-08-264-030-11	Sequence 11, Appli
40	84	43.3	16	3	US-09-054-393-8	Sequence 8, Appli
41	84	43.3	16	4	US-09-229-900-8	Sequence 8, Appli
42	83.5	43.0	25	1	US-08-264-030-8	Sequence 8, Appli
43	82	42.3	19	1	US-07-882-923-5	Sequence 5, Appli
44	82	42.3	24	4	US-09-054-393-5	Sequence 5, Appli
45	82	42.3	24	4	US-09-229-900-5	Sequence 5, Appli

## ALIGNMENTS

RESULT 1  
US-08-338-395-2  
; Sequence 2, Application US/08338395  
; Patent No. 5574010  
GENERAL INFORMATION:  
APPLICANT: McFadden, David W  
TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS WITH  
NUMBER OF INVENTIONS: 5  
TITLE OF INVENTION: PEPTIDE YY AND ANALOGS THEREOF  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESSES:  
ADDRESS: POMS, SMITH, LANDE & ROSE  
STREET: 2029 Century Park East 38th Floor  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90067  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentln Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/338,395  
FILING DATE:  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Oldenkamp, David J  
REGISTRATION NUMBER: 29421  
REFERENCE/DOCKET NUMBER: 107012  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 310-788-5046  
TELEFAX: 310-277-1297  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN PEPTIDE YY  
US-08-338-395-2

Query Match 100.0% Score 194; DB 1; Length 36;  
Best Local Similarity 100.0%; Pred. No. 7.4e-22;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 YPIKPEAPGEDASPELNRYVSLRHYLNLVTRORY 36  
DB 1 YPIKPEAPGEDASPELNRYVSLRHYLNLVTRORY 36

RESULT 2  
US-08-329-151-2  
; Sequence 2, Application US/08329151  
; Patent No. 5604203  
; GENERAL INFORMATION:  
; APPLICANT: Balasubramanian, A.  
; TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USHS  
; TITLE OF INVENTION: THREEOF  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: U.S.A.  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 MB  
; COMPUTER: IBM PS/2 Model 502 or 55SX  
; OPERATING SYSTEM: MS-DOS (Version 5.0)  
; SOFTWARE: WordPerfect (Version 5.1)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/329,151  
; FILING DATE:  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/038,534  
; FILING DATE: 3/29/93  
; APPLICATION NUMBER: 08/109,326  
; FILING DATE: 08/19/93  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Paul T. Clark  
; REGISTRATION NUMBER: 30,162  
; REFERENCE/DOCKET NUMBER: 00537/105001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (617) 542-5070  
; TELEFAX: (617) 542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 36  
; TYPE: amino acid  
; STRANDEDNESS: N/A  
; TOPOLOGY: linear  
; US-08-329-151-2

Query Match 100.0%; Score 194; DB 1; Length 36;  
Best Local Similarity 100.0%; Pred. No. 7.4e-22;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36  
DB 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

RESULT 3  
US-09-054-393-2  
; Sequence 2, Application US/09054393  
; Patent No. 6017879  
; GENERAL INFORMATION:  
; APPLICANT: Mutter, Manfred  
; APPLICANT: Lacroix, Jean S.  
; APPLICANT: Grouzmann, Eric  
; TITLE OF INVENTION: Template Associated NPY Y2-Receptor  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Vinson & Elkins LLP  
; STREET: 1455 Pennsylvania Avenue, N.W.  
; CITY: Washington

STATE: D.C.  
COUNTRY: U.S.  
ZIP: 20004-1008  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/054,393  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Sanzo, Michael A.  
REGISTRATION NUMBER: 36,912  
REFERENCE/DOCKET NUMBER: BMR350/48000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)639-6585  
TELEFAX: (202)639-6604  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
STRANDEDNESS: not relevant  
MOLECULE TYPE: peptide  
TOPOLOGY: not relevant  
HYPOTHETICAL: NO  
AMTI-SENSE: NO  
US-09-054-393-2

Query Match 100.0%; Score 194; DB 3; Length 36;  
Best Local Similarity 100.0%; Pred. No. 7.4e-22;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36  
DB 1 YPIKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

RESULT 4  
US-09-047-986B-2  
; Sequence 2, Application US/09047986B  
; Patent No. 6046167  
; GENERAL INFORMATION:  
; APPLICANT: Balasubramanian, Ambikaipakan  
; TITLE OF INVENTION: PEPTIDE YY ANALOGS  
; NUMBER OF SEQUENCES: 20  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Frost & Jacobs, L.L.P.  
; STREET: 2500 PNC Center, 201 East Fifth St.  
; CITY: Cincinnati  
; STATE: OH  
; COUNTRY: USA  
; ZIP: 45202-4182  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage  
; COMPUTER: IBM compatible  
; OPERATING SYSTEM: MS-DOS  
; SOFTWARE: Word 97  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/047,986B  
; FILING DATE: 25 March 1998  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Kristyne A. Bullock  
; REGISTRATION NUMBER: 42,371  
; REFERENCE/DOCKET NUMBER: 9183030/508  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (513) 651-6731  
; TELEFAX: (513) 651-6981  
; TELEX: 21-4396 F&J Cln  
; INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-047-986B-2

Query Match 100.0%; Score 194; DB 3; Length 36;  
Best Local Similarity 100.0%; Pred. No. 7.4e-22;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36  
|||||  
DB 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36

RESULT 5  
US-09-229-900-2  
Sequence 2, Application US/09229900  
Patent No. 6288029

GENERAL INFORMATION:  
APPLICANT: Mutter, Manfred  
APPLICANT: Lacroix, Jean S.  
APPLICANT: Grouzmann, Eric  
TITLE OF INVENTION: Template Associated NPY Y2-Receptor  
TITLE OF INVENTION: Agonists  
NUMBER OF SEQUENCES: 8  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Vanson & Elkins LLP  
STREET: 1455 Pennsylvania Avenue, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: U.S.  
ZIP: 20004-1008  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/229,900  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Sanzo, Michael A.  
REGISTRATION NUMBER: 36,912  
REFERENCE/DOCKET NUMBER: BMR350/48000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)639-6585  
TELEFAX: (202)639-6604  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
STRANDEDNESS: not relevant  
TOPOLOGY: not relevant  
MOLECULE TYPE: peptide  
HYPOTHEICAL: NO  
ANTI-SENSE: NO  
US-09-229-900-2

Query Match 100.0%; Score 194; DB 4; Length 36;  
Best Local Similarity 100.0%; Pred. No. 7.4e-22;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36  
|||||  
DB 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36

RESULT 6

PCT-US95-14303-2  
Sequence 2, Application PC/TUS9514303  
GENERAL INFORMATION:  
APPLICANT: McFadden, David W  
TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS  
TITLE OF INVENTION: WITH PEPTIDE YY AND ANALOGS THEREOF  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: POMS, SMITH, LANDE & ROSE  
STREET: 2029 Century Park East 38th Floor  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90067

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/14303  
FILING DATE: 03 November 1995  
CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:  
NAME: Oldenkamp, David J  
REGISTRATION NUMBER: 29421  
REFERENCE/DOCKET NUMBER: 107012P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 310-788-5046  
TELEFAX: 310-277-1297  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE: HUMAN PEPTIDE YY  
PCT-US95-14303-2

Query Match 100.0%; Score 194; DB 5; Length 36;  
Best Local Similarity 100.0%; Pred. No. 7.4e-22;  
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36  
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DB 1 YPIKPEAPGEDASPELNRYASLRHYLNLVTRORY 36

RESULT 7  
US-07-882-923-3  
Sequence 3, Application US/07882923  
Patent No. 5328899  
GENERAL INFORMATION:  
APPLICANT: Boudlik, Jaroslav H.  
APPLICANT: Rivier, Jean E.F.  
APPLICANT: Brown, Marvin R.  
APPLICANT: Scott, Neal A.  
TITLE OF INVENTION: NPY PEPTIDE ANALOGS  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fitch, Even, Tabin & Flanner  
STREET: 4250 Executive Square, Suite 510  
CITY: La Jolla  
STATE: CA  
COUNTRY: USA  
ZIP: 92037  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25

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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/882,923
; FILING DATE: 19920512
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/503,198
; FILING DATE: 30-MAR-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/219,596
; FILING DATE: 15-JUL-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Schumann, James J.
; REGISTRATION NUMBER: 20,856
; REFERENCE/DOCKET NUMBER: 52864
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-552-1311
; TELEFAX: 619-552-0095
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; US-07-882-923-3

Query Match          94.8%; Score 184; DB 1; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.2e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36
Db 1 YPKPEAPGEDASPEELSRYSRLRYLNLVTRORY 36

RESULT 8
US-08-338-395-1
; Sequence 1, Application US/08338395
; Patent No. 5574010
; GENERAL INFORMATION:
; APPLICANT: McFadden, David W
; TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS WITH
; TITLE OF INVENTION: PEPTIDE YY AND ANALOGS THEREOF
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: POMES, SMITH, LANDE & ROSE
; STREET: 2029 Century Park East 38th Floor
; CITY: Los Angeles
; STATE: CA
; COUNTRY: USA
; ZIP: 90067
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/338,395
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Oldenkamp, David J
; REGISTRATION NUMBER: 29421
; REFERENCE/DOCKET NUMBER: 107012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 310-788-5046
; TELEFAX: 310-277-1297
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

;
; ORIGINAL SOURCE:
; ORGANISM: porcine peptide yy
; US-08-338-395-1

Query Match          94.8%; Score 184; DB 1; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.2e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36
Db 1 YPKPEAPGEDASPEELSRYSRLRYLNLVTRORY 36

RESULT 9
US-08-329-151-1
; Sequence 1, Application US/08329151
; Patent No. 5604203
; GENERAL INFORMATION:
; APPLICANT: Balasubramaniam, A.
; TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USES
; TITLE OF INVENTION: THEREOF
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02110-2804
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM PS/2 Model 502 or 555X
; OPERATING SYSTEM: MS-DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/329,151
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/038,534
; FILING DATE: 3/29/93
; APPLICATION NUMBER: 08/109,326
; FILING DATE: 08/19/93
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul T. Clark
; REGISTRATION NUMBER: 30,162
; REFERENCE/DOCKET NUMBER: 00537/105001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36
; TYPE: amino acid
; STRANDEDNESS: N/A
; TOPOLOGY: linear
; US-08-329-151-1

Query Match          94.8%; Score 184; DB 1; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.2e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 YPKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36
Db 1 YPKPEAPGEDASPEELSRYSRLRYLNLVTRORY 36

RESULT 10
US-09-047-986B-1
; Sequence 1, Application US/09047986B
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```

Patent No. 6046167
GENERAL INFORMATION:
APPLICANT: Balasubramanian, Ambikaipakan
TITLE OF INVENTION: PEPTIDE YY ANALOGS
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Frost & Jacobs, L.L.P.
STREET: 2500 PNC Center, 201 East Fifth St.
CITY: Cincinnati
STATE: OH
COUNTRY: USA
ZIP: 45202-4182
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: Word 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/047, 986B
FILING DATE: 25 March 1998
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Kristyne A. Bullock
REGISTRATION NUMBER: 42,371
REFERENCE/DOCKET NUMBER: 9183030/508
TELECOMMUNICATION INFORMATION:
TELEPHONE: (513) 651-6731
TELEFAX: (513) 651-6981
TELEX: 21-4396 F&J Cln
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-047-986B-1

Query Match          94.8%; Score 184; DB 3; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.2e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 YPKPEAGDASPEELNRYASLRHYLNLVTRQRY 36
Db 1 YPKPEAGDASPEELSRYYASLRHYLNLVTRQRY 36

RESULT 11
T-US95-14303-1
Sequence 1, Application PC/TUS9514303
GENERAL INFORMATION:
APPLICANT: McFadden, David W
TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS
TITLE OF INVENTION: WITH PEPTIDE YY AND ANALOGS THEREOF
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: POMs, SMITH, LANDE & ROSE
STREET: 2029 Century Park East 38th Floor
CITY: Los Angeles
STATE: CA
COUNTRY: USA
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/14303
FILING DATE: 03 November 1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Oldenkamp, David J

```

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REGISTRATION NUMBER: 29421
REFERENCE/DOCKET NUMBER: 107012P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-788-5046
TELEFAX: 310-277-1297
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: porcine peptide yy
PCT-US95-14303-1

Query Match          94.8%; Score 184; DB 5; Length 36;
Best Local Similarity 94.4%; Pred. No. 2.2e-20;
Matches 34; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 YPKPEAGDASPEELNRYASLRHYLNLVTRQRY 36
Db 1 YPKPEAGDASPEELSRYYASLRHYLNLVTRQRY 36

RESULT 12
US-08-329-151-9
Sequence 9, Application US/08329151
Patent No. 5604203
GENERAL INFORMATION:
APPLICANT: Balasubramanian, A.
TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USES
TITLE OF INVENTION: THEREOF
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: Wordperfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/329,151
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/038,534
FILING DATE: 3/29/93
APPLICATION NUMBER: 08/109,326
FILING DATE: 08/19/93
ATTORNEY/AGENT INFORMATION:
NAME: Paul T. Clark
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00537/105001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 36
TYPE: amino acid
STRANDEDNESS: N/A
TOPOLOGY: linear
FEATURE:
OTHER INFORMATION: Xaa in position 26 is an abbreviation of
OTHER INFORMATION: im-DNP-His. The sequence has an acetylated N-terminus (1.
OTHER INFORMATION: than an amino N-terminus (i.e., H2N-). The sequence has a

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OTHER INFORMATION: (i.e., CO-NH2), rather than a carboxyl C-terminus (i.e., CO-D

US-08-329-151-9

Query Match

Best Local Similarity 90.2%; Score 175; DB 1; Length 36;  
Matches 33; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 YPKPEAPGEDASPEELNRYASLRHYLNLYTRQRY 36  
DB 1 YPAKPEAPGEDASPEELNRYASLRHYLNLYTRQRY 36

RESULT 13

US-07-776-272-30  
Sequence 30, Application US/07776272  
Patent No. 5612454

GENERAL INFORMATION:

APPLICANT: Kaminuma, Toshihiko  
APPLICANT: Iida, Toshil

TITLE OF INVENTION: Process for Purification of Polypeptide

NUMBER OF SEQUENCES: 31

CORRESPONDENCE ADDRESS:

ADDRESSEE: Wegner, Cantor, Mueller & Player  
STREET: 1233 20th St. N.W. P.O. Box 18218

CITY: Washington

STATE: District of Columbia

COUNTRY: United States of America

ZIP: 20036-8218

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/776,272

FILING DATE: 19911129

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: Player, William E

REGISTRATION NUMBER: 31,409

REFERENCE/DOCKET NUMBER: P-450-23167

TELECOMMUNICATION INFORMATION:

TELEPHONE: 202-887-0400

TELEFAX: 202-887-0605

TELEX: 440706

INFORMATION FOR SEQ ID NO: 30:

SEQUENCE CHARACTERISTICS:

LENGTH: 35 amino acids

TYPE: AMINO ACID

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: YES

US-07-776-272-30

Query Match

Best Local Similarity 81.7%; Score 158.5; DB 1; Length 35;  
Matches 32; Conservative 1; Mismatches 2; Indels 1; Gaps 1;

QY 1 YPKPEAPGEDASPEELNRYASLRHYLNLYTRQRY 36  
DB 1 YPAKPEAPGEDASPEELNRYASLRHYLNLYTRQRY 35

RESULT 14

US-07-882-923-1  
Sequence 1, Application US/07882923  
Patent No. 5328899

GENERAL INFORMATION:

APPLICANT: Boublík, Jaroslav H.

APPLICANT: Rivier, Jean E.F.

APPLICANT: Brown, Marvin R.

APPLICANT: Scott, Neal A.

TITLE OF INVENTION: NPV PEPTIDE ANALOGS

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fitch, Even, Tabin & Flannery

STREET: 4250 Executive Square, Suite 510

CITY: La Jolla

STATE: CA

COUNTRY: USA

ZIP: 92037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/882,923

FILING DATE: 19920512

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/503,198

FILING DATE: 30-MAR-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/219,596

FILING DATE: 15-JUL-1988

ATTORNEY/AGENT INFORMATION:

NAME: Schumann, James J.

REGISTRATION NUMBER: 20,856

REFERENCE/DOCKET NUMBER: 52864

TELECOMMUNICATION INFORMATION:

TELEPHONE: 619-552-1311

TELEFAX: 619-552-0095

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 36 amino acids

TYPE: AMINO ACID

TOPOLOGY: unknown

MOLECULE TYPE: peptide

US-07-882-923-1

Query Match

Best Local Similarity 75.3%; Score 146; DB 1; Length 36;  
Matches 25; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

QY 1 YPKPEAPGEDASPEELNRYASLRHYLNLYTRQRY 36  
DB 1 YPSKPDNPGEDAPADDLARYSALRHYLNLYTRQRY 36

RESULT 15

US-08-264-030-1  
Sequence 1, Application US/08264030  
Patent No. 5569742

GENERAL INFORMATION:

APPLICANT: KIRBY, Dean A.

APPLICANT: RIVIER, Jean E.F.

TITLE OF INVENTION: CENTRALLY TRUNCATED NPV CYCLIC PEPTIDE

NUMBER OF SEQUENCES: 11

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fitch, Even, Tabin & Flannery

STREET: 135 South La Salle Street, Suite 900

CITY: Chicago

STATE: IL

COUNTRY: USA

ZIP: 60603

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

;;  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/264,030  
;; FILING DATE:  
;; CLASSIFICATION: 530  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Schumann, James J  
;; REGISTRATION NUMBER: 20,856  
;; REFERENCE/DOCKET NUMBER: 55649  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (619) 552-1311  
;; TELEFAX: (619) 552-0095  
;; INFORMATION FOR SEQ ID NO: 1:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 36 amino acids  
;; TYPE: amino acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: peptide  
;; HYPOTHEICAL: NO  
;; ANTI-SENSE: NO  
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8-08-264-030-1

Query Match 75.3%; Score 146; DB 1; Length 36;  
Best Local Similarity 69.4%; Pred. NO. 8.3e-15;  
Matches 25; Conservative 6; Mismatches 5; Indels 0; Gaps 0;  
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DB 1 YPSKPDNPGEDAPADLARYSALRHYLNLVTRORY 36

Search completed: July 30, 2002, 08:01:31  
Job time: 119 sec



GenCore version 4.5  
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: July 30, 2002, 08:01:31 ; Search time 20.59 Seconds  
(without alignments)  
40.334 Million cell updates/sec

Title: US-10-016-969-3

Sequence: 1 IKPEAPGEDASPEELNRYASLRHYLNLVTROY 34

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

231628 seqs, 24425594 residues

Database : Issued Patents-AA:\*

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

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2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PTOTUS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	180	100.0	36	1	US-08-338-395-2
2	180	100.0	36	1	US-08-329-151-2
3	180	100.0	36	3	US-09-054-393-2
4	180	100.0	36	4	US-09-047-986B-2
5	180	100.0	36	4	US-09-229-900-2
6	180	100.0	36	5	PCT-US95-14303-2
7	171	95.0	36	1	US-07-882-923-3
8	171	95.0	36	1	US-08-338-395-1
9	171	95.0	36	1	US-08-329-151-1
10	171	95.0	36	3	US-09-047-986B-1
11	171	95.0	36	5	PCT-US95-14303-1
12	162	90.0	36	1	US-08-329-151-9
13	145.5	80.8	35	1	US-07-776-272-30
14	134	74.4	36	1	US-07-882-923-1
15	134	74.4	36	1	US-08-264-030-1
16	134	74.4	36	3	US-08-338-395-4
17	134	74.4	36	3	US-08-907-403A-2
18	134	74.4	36	5	PCT-US95-14303-4
19	132	73.3	36	1	US-07-882-923-2
20	132	73.3	36	1	US-08-338-395-3
21	132	73.3	36	1	US-08-329-151-24
22	132	73.3	36	3	US-08-907-403A-1
23	132	73.3	36	5	PCT-US95-14303-3
24	132	73.3	97	3	US-09-054-393-1
25	132	73.3	97	3	US-08-994-946A-6
26	132	73.3	97	4	US-09-229-900-1
27	132	73.3	97	4	US-09-291-994-6

28	115	63.9	24	3	US-09-054-393-7	Sequence 7, Appl
29	115	63.9	24	4	US-09-229-900-7	Sequence 7, Appl
30	103.5	57.5	31	1	US-07-776-272-23	Sequence 23, Appl
31	99	55.0	36	2	US-08-806-203-1	Sequence 1, Appl
32	98	54.4	36	1	US-07-776-272-18	Sequence 18, Appl
33	88	48.9	20	1	US-07-882-923-11	Sequence 11, Appl
34	85	47.2	19	1	US-07-882-923-4	Sequence 4, Appl
35	85	47.2	28	1	US-08-264-030-3	Sequence 3, Appl
36	84	46.7	16	3	US-09-054-393-8	Sequence 8, Appl
37	84	46.7	16	4	US-09-229-900-8	Sequence 8, Appl
38	84	46.7	18	1	US-08-264-030-5	Sequence 5, Appl
39	83	46.1	28	1	US-08-264-030-10	Sequence 10, Appl
40	82	45.6	19	1	US-07-882-923-5	Sequence 5, Appl
41	79	43.9	19	1	US-07-882-923-9	Sequence 9, Appl
42	79	43.9	20	1	US-07-882-923-8	Sequence 8, Appl
43	79	43.9	20	1	US-07-882-923-10	Sequence 10, Appl
44	78	43.3	20	1	US-07-882-923-12	Sequence 12, Appl
45	77	42.8	15	1	US-08-329-151-10	Sequence 10, Appl

#### ALIGNMENTS

RESULT 1  
US-08-338-395-2  
; Sequence 2, Application US/08338395  
; Patent No. 5574010  
; GENERAL INFORMATION:  
; APPLICANT: McFadden, David W  
; TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS WITH  
; NUMBER OF INVENTIONS: 5  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: POMS, SMITH, LANDE & ROSE  
; STREET: 2029 Century Park East 38th Floor  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90067  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/338,395  
; FILING DATE:  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Oldenkamp, David J  
; REGISTRATION NUMBER: 29421  
; REFERENCE/DOCKET NUMBER: 107012  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 310-788-5046  
; TELEFAX: 310-277-1297  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 36 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; ORIGINAL SOURCE:  
; ORGANISM: HUMAN PEPTIDE YY  
; US-08-338-395-2

Query Match 100.0% Score 180; DB 1; Length 36;  
Best Local Similarity 100.0%; Pred. No. 1.5e-20;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTROY 34  
DB 3 IKPEAPGEDASPEELNRYASLRHYLNLVTROY 36

✓  
RESULT 2  
US-08-329-151-2  
; Sequence 2, Application US/08329151  
; Patent No. 5604203  
; GENERAL INFORMATION:  
; APPLICANT: Balasubramanian, A.  
; TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USES  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: U.S.A.  
; ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 MB  
COMPUTER: IBM PS/2 Model 502 or 55SX  
OPERATING SYSTEM: MS-DOS (Version 5.0)  
SOFTWARE: WordPerfect (Version 5.1)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/329,151  
FILING DATE:  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/038,534  
FILING DATE: 3/29/93  
APPLICATION NUMBER: 08/109,326  
FILING DATE: 08/19/93  
ATTORNEY/AGENT INFORMATION:  
NAME: Paul T. Clark  
REGISTRATION NUMBER: 30,162  
REFERENCE/DOCKET NUMBER: 00537/105001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36  
TYPE: amino acid  
STRANDEDNESS: N/A  
TOPOLOGY: linear  
US-08-329-151-2

Query Match 100.0%; Score 180; DB 1; Length 36;  
Best Local Similarity 100.0%; Pred. No. 1.5e-20;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
Db 3 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

RESULT 3  
US-09-054-393-2  
; Sequence 2, Application US/09054393  
; Patent No. 6017879  
; GENERAL INFORMATION:  
; APPLICANT: Mutter, Manfred  
; APPLICANT: Lacroix, Jean S.  
; TITLE OF INVENTION: Template Associated NPV Y2-Receptor  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Vinson & Elkins LLP  
; STREET: 1455 Pennsylvania Avenue, N.W.  
; CITY: Washington

STATE: D.C.  
COUNTRY: U.S.  
ZIP: 20004-1008  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/054,393  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Sanzo, Michael A.  
REGISTRATION NUMBER: 36,912  
REFERENCE/DOCKET NUMBER: BMR350/48000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)639-6604  
TELEFAX: (202)639-6585  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
STRANDEDNESS: not relevant  
TOPOLOGY: not relevant  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
US-09-054-393-2

Query Match 100.0%; Score 180; DB 3; Length 36;  
Best Local Similarity 100.0%; Pred. No. 1.5e-20;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
Db 3 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

RESULT 4  
US-09-047-986B-2  
; Sequence 2, Application US/09047986B  
; Patent No. 6046167  
; GENERAL INFORMATION:  
; APPLICANT: Balasubramanian, Ambikaipakan  
; TITLE OF INVENTION: PEPTIDE YY ANALOGS  
; NUMBER OF SEQUENCES: 20  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Frost & Jacobs, L.L.P.  
; STREET: 2500 PNC Center, 201 East Fifth St.  
; CITY: Cincinnati  
; STATE: OH  
; COUNTRY: USA  
; ZIP: 45202-4182  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage  
COMPUTER: IBM compatible  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: Word 97  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/047,986B  
FILING DATE: 25 March 1998  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Kristy A. Bullock  
REGISTRATION NUMBER: 42,371  
REFERENCE/DOCKET NUMBER: 9183030/508  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (513) 651-6731  
TELEFAX: (513) 651-6981  
TELEX: 21-4396 P&J cin  
INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-047-986B-2

Query Match 100.0%; Score 180; DB 3; Length 36;  
Best Local Similarity 100.0%; Pred. No. 1.5e-20;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 3 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

## RESULT 5

US-09-229-900-2  
Sequence 2, Application US/09229900  
Patent No. 6288029

GENERAL INFORMATION:  
APPLICANT: Muller, Manfred  
APPLICANT: Lacroix, Jean S.  
APPLICANT: Grouzmann, Eric  
TITLE OF INVENTION: Template Associated NPY Y2-Receptor  
TITLE OF INVENTION: Agonists  
NUMBER OF SEQUENCES: 8  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Vinson & Elkins LLP  
STREET: 1455 Pennsylvania Avenue, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: U.S.  
ZIP: 20004-1008  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/229,900  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Sanzo, Michael A.  
REGISTRATION NUMBER: 36,912  
REFERENCE/DOCKET NUMBER: BMR350/48000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202)639-6585  
TELEFAX: (202)639-6604  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
STRANDEDNESS: not relevant  
TOPOLOGY: not relevant  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
US-09-229-900-2

Query Match 100.0%; Score 180; DB 4; Length 36;  
Best Local Similarity 100.0%; Pred. No. 1.5e-20;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 3 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

RESULT 6

PCT-US95-14303-2  
Sequence 2, Application PC/TUS9514303

GENERAL INFORMATION:  
APPLICANT: McFadden, David W  
TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS  
TITLE OF INVENTION: WITH PEPTIDE YY AND ANALOGS THEREOF  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: POMS, SMITH, LANDE & ROSE  
STREET: 2029 Century Park East 38th Floor  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90067  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/14303  
FILING DATE: 03 November 1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Oldenkamp, David J  
REGISTRATION NUMBER: 29421  
REFERENCE/DOCKET NUMBER: 107012F  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 310-788-5046  
TELEFAX: 310-277-1297  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN PEPTIDE YY  
PCT-US95-14303-2

Query Match 100.0%; Score 180; DB 5; Length 36;  
Best Local Similarity 100.0%; Pred. No. 1.5e-20;  
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 34  
|||||  
DB 3 IKPEAPGEDASPEELNRYASLRHYLNLVTRORY 36

## RESULT 7

US-07-882-923-3  
Sequence 3, Application US/07882923  
Patent No. 5328699  
GENERAL INFORMATION:  
APPLICANT: Boudlik, Jaroslav H.  
APPLICANT: Rivier, Jean E.F.  
APPLICANT: Brown, Marvin R.  
APPLICANT: Scott, Neal A.  
TITLE OF INVENTION: NPY PEPTIDE ANALOGS  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fitch, Even, Tabin & Flannery  
STREET: 4250 Executive Square, Suite 510  
CITY: La Jolla  
STATE: CA  
COUNTRY: USA  
ZIP: 92037  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25

;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/07/882,923  
;; FILING DATE: 19920512  
;; CLASSIFICATION: 514  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 07/503,198  
;; FILING DATE: 30-MAR-1990  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 07/219,596  
;; FILING DATE: 15-JUL-1988  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Schumann, James J.  
;; REGISTRATION NUMBER: 20,856  
;; REFERENCE/DOCKET NUMBER: 52864  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 619-552-1311  
;; TELEFAX: 619-552-0095  
;; INFORMATION FOR SEQ ID NO: 3:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 36 amino acids  
;; TYPE: AMINO ACID  
;; TOPOLOGY: unknown  
;; MOLECULE TYPE: peptide  
US-07-882-923-3

Query Match 95.0%; Score 171; DB 1; Length 36;  
Best Local Similarity 97.0%; Pred. No. 3,4e-19;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTROY 34  
Db 4 KPEAPGEDASPEELSRYYASLRHYLNLVTROY 36

RESULT 8  
US-08-338-395-1  
; Sequence 1, Application US/08338395  
; Patent No. 5574010  
; GENERAL INFORMATION:  
; APPLICANT: McFadden, David W  
; TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS WITH  
; TITLE OF INVENTION: PEPTIDE YY AND ANALOGS THEREOF  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: POMES, SMITH, LANDE & ROSE  
; STREET: 2029 Century Park East 38th Floor  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90067  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/338,395  
; FILING DATE:  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Oldenkamp, David J  
; REGISTRATION NUMBER: 29421  
; REFERENCE/DOCKET NUMBER: 107012  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 310-788-5046  
; TELEFAX: 310-277-1297  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 36 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide

;; ORIGINAL SOURCE:  
;; ORGANISM: porcine peptide yy  
US-08-338-395-1

Query Match 95.0%; Score 171; DB 1; Length 36;  
Best Local Similarity 97.0%; Pred. No. 3,4e-19;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTROY 34  
Db 4 KPEAPGEDASPEELSRYYASLRHYLNLVTROY 36

RESULT 9  
US-08-329-151-1  
; Sequence 1, Application US/08329151  
; Patent No. 5604203  
; GENERAL INFORMATION:  
; APPLICANT: Balasubramaniam, A.  
; TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USES  
; TITLE OF INVENTION: THEREOF  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: U.S.A.  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 MB  
; OPERATING SYSTEM: IBM PS/2 Model 502 or 555X  
; SOFTWARE: Wordperfect (Version 5.1)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/329,151  
; FILING DATE:  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/038,534  
; FILING DATE: 3/29/93  
; APPLICATION NUMBER: 08/109,326  
; FILING DATE: 08/19/93  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Paul T. Clark  
; REGISTRATION NUMBER: 30,162  
; REFERENCE/DOCKET NUMBER: 00537/105001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (617) 542-5070  
; TELEFAX: (617) 542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 36  
; TYPE: amino acid  
; STRANDEDNESS: N/A  
; TOPOLOGY: linear  
US-08-329-151-1

Query Match 95.0%; Score 171; DB 1; Length 36;  
Best Local Similarity 97.0%; Pred. No. 3,4e-19;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2 KPEAPGEDASPEELNRYASLRHYLNLVTROY 34  
Db 4 KPEAPGEDASPEELSRYYASLRHYLNLVTROY 36

RESULT 10  
US-09-047-9868-1  
; Sequence 1, Application US/09047986B

Patent No. 6046167  
GENERAL INFORMATION:  
APPLICANT: Balasubramanian, Ambikaipakan  
TITLE OF INVENTION: PEPTIDE YY ANALOGS  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Frost & Jacobs, L.L.P.  
STREET: 2500 PNC Center, 201 East Fifth St.  
CITY: Cincinnati  
STATE: OH  
COUNTRY: USA  
ZIP: 45202-4182  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage  
COMPUTER: IBM compatible  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: Word 97  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/047, 986B  
FILING DATE: 25 March 1998  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Kristyne A. Bullock  
REGISTRATION/DOCKET NUMBER: 42,371  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (513) 651-6731  
TELEFAX: (513) 651-6981  
TELEX: 21-4396 F&J Cln  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-047-986B-1

Query Match 95.0%; Score 171; DB 3; Length 36;  
Best Local Similarity 97.0%; Pred. No. 3,4e-19;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 KPEAGDASPEELNRYASLRHYLNLVTRQRY 34  
|||||  
DB 4 KPEAGDASPEELSRYYASLRHYLNLVTRQRY 36

SUPL 11  
US95-14303-1  
Sequence 1, Application PC/7US9514303  
GENERAL INFORMATION:  
APPLICANT: McFadden, David W  
TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS  
TITLE OF INVENTION: WITH PEPTIDE YY AND ANALOGS THEREOF  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: POMS, SMITH, LANDE & ROSE  
STREET: 2029 Century Park East 38th Floor  
CITY: Los Angeles  
STATE: CA  
COUNTRY: USA  
ZIP: 90067  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PC/US95/14303  
FILING DATE: 03 November 1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Oldenkamp, David J

REGISTRATION NUMBER: 29421  
REFERENCE/DOCKET NUMBER: 107012P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 310-788-5046  
TELEFAX: 310-277-1297  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: porcine peptide YY  
PCT-US95-14303-1

Query Match 95.0%; Score 171; DB 5; Length 36;  
Best Local Similarity 97.0%; Pred. No. 3,4e-19;  
Matches 32; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 KPEAGDASPEELNRYASLRHYLNLVTRQRY 34  
|||||  
DB 4 KPEAGDASPEELSRYYASLRHYLNLVTRQRY 36

RESULT 12  
US-08-329-151-9  
Sequence 9, Application US/08329151  
Patent No. 5604203  
GENERAL INFORMATION:  
APPLICANT: Balasubramanian, A.  
TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USES  
TITLE OF INVENTION: THEREOF  
NUMBER OF SEQUENCES: 30  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: Massachusetts  
COUNTRY: U.S.A.  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
COMPUTER: IBM PS/2 Model 502 or 55SX  
OPERATING SYSTEM: MS-DOS (Version 5.0)  
SOFTWARE: WordPerfect (Version 5.1)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/329, 151  
FILING DATE:  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/038, 534  
FILING DATE: 3/29/93  
APPLICATION NUMBER: 08/109, 326  
FILING DATE: 08/19/93  
ATTORNEY/AGENT INFORMATION:  
NAME: Paul T. Clark  
REGISTRATION NUMBER: 30,162  
REFERENCE/DOCKET NUMBER: 00537/105001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36  
TYPE: amino acid  
STRANDEDNESS: N/A  
TOPOLOGY: linear  
FEATURE:  
OTHER INFORMATION: Xaa in position 26 is an abbreviation of im-DNP-His. The sequence has an acetylated N-terminus (i.e., H2N-). The sequence has a than an amino N-terminus (i.e., H2N-). The sequence has a

OTHER INFORMATION: (i.e., CO-NH2), rather than a carboxyl C-terminus (i.e., CO-D

US-08-329-151-9

Query Match

Best Local Similarity 90.0%; Score 162; DB 1; Length 36;  
Matches 31; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHYNLVYTRORY 34  
DB 4 KPEAPGEDASPEELNRYASLRHYNLVYTRORY 36

RESULT 13

US-07-776-272-30  
Sequence 30, Application US/07776272  
Patent No. 5612454

GENERAL INFORMATION:

APPLICANT: Kamitama, Toshihiko  
APPLICANT: Iida, Toshii

TITLE OF INVENTION: Process for Purification of Polypeptide  
NUMBER OF SEQUENCES: 31

CORRESPONDENCE ADDRESS:

ADDRESSEE: Wegner, Cantor, Mueller & Player  
STREET: 1233 20th St. N.W. P.O. Box 18218  
CITY: Washington

STATE: District of Columbia  
COUNTRY: United States of America  
ZIP: 20036-8218

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/776,272  
FILING DATE: 19911129

CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:

NAME: Player, William E  
REGISTRATION NUMBER: 31,409

REFERENCE/DOCKET NUMBER: P-450-23167  
TELECOMMUNICATION INFORMATION:

TELEPHONE: 202-887-0400  
TELEFAX: 202-887-0605

TELEX: 440706  
INFORMATION FOR SEQ ID NO: 30:

SEQUENCE CHARACTERISTICS:  
LENGTH: 35 amino acids

TYPE: AMINO ACID  
TOPOLOGY: linear

MOLECULE TYPE: peptide  
HYPOTHETICAL: YES

US-07-776-272-30

Query Match

Best Local Similarity 80.8%; Score 145.5; DB 1; Length 35;  
Matches 30; Conservative 1; Mismatches 1; Indels 1; Gaps 1;

QY 2 KPEAPGEDASPEELNRYASLRHYNLVYTRORY 34  
DB 4 KPEAPGEDASPEELNRYASLRHYNLVYTRORY 35

RESULT 14

US-07-882-923-1  
Sequence 1, Application US/07882923  
Patent No. 5328899

GENERAL INFORMATION:

APPLICANT: Boudlik, Jaroslav H.  
APPLICANT: Rivier, Jean E.F.

APPLICANT: Brown, Marvin R.

APPLICANT: Scott, Neal A.  
TITLE OF INVENTION: NPV PEPTIDE ANALOGS

NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Fitch, Even, Tabin & Flannery  
STREET: 4250 Executive Square, Suite 510  
CITY: La Jolla

STATE: CA  
COUNTRY: USA

ZIP: 92037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/882,923

FILING DATE: 19920512  
CLASSIFICATION: 514

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/503,198

FILING DATE: 30-MAR-1990  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/219,596  
FILING DATE: 15-JUL-1988

ATTORNEY/AGENT INFORMATION:  
NAME: Schumann, James J.

REGISTRATION NUMBER: 20,856  
REFERENCE/DOCKET NUMBER: 52864

TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-552-1311

TELEFAX: 619-552-0095  
INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids

TYPE: AMINO ACID  
TOPOLOGY: unknown

MOLECULE TYPE: peptide  
US-07-882-923-1

Query Match

Best Local Similarity 74.4%; Score 134; DB 1; Length 36;  
Matches 23; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

QY 2 KPEAPGEDASPEELNRYASLRHYNLVYTRORY 34  
DB 4 KPDNPEGDAPADLARYSALRHYNLVYTRORY 36

RESULT 15

US-08-264-030-1  
Sequence 1, Application US/08264030  
Patent No. 5569742

GENERAL INFORMATION:

APPLICANT: Kirby, Dean A.  
APPLICANT: Rivier, Jean E.F.

TITLE OF INVENTION: CENTRALITY TRUNCATED NPV CYCLIC PEPTIDE  
NUMBER OF SEQUENCES: 11

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fitch, Even, Tabin & Flannery

STREET: 135 South La Salle Street, Suite 900  
CITY: Chicago

STATE: IL  
COUNTRY: USA

ZIP: 60603

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/264,030  
FILING DATE:  
CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:  
NAME: Schumann, James J  
REGISTRATION NUMBER: 20,856  
REFERENCE/DOCKET NUMBER: 55649  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 552-1311  
TELEFAX: (619) 552-0095  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 36 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
S-08-264-030-1

Query Match 74.4%; Score 134; DB 1; Length 36;  
Best Local Similarity 69.7%; Pred. No. 1.3e-13;  
Matches 23; Conservative 6; Mismatches 4; Indels 0; Gaps 0;  
QY 2 KPEAPGEDASPEELNRYTASLRHYLNLVTRQRY 34  
||:|||||{|:||||:||||:|||||  
Db 4 KPDPGEDAPAPEDLARYSALRHYINLITRQRY 36

Search completed: July 30, 2002, 08:01:31  
Job time: 119 sec

